Rules of Engagement for Structural Firefighting

Increasing Firefighter Survival

Developed by the Safety, Health and Survival Section of the International Association of Fire Chiefs

DRAFT

June 2009

Introduction

The International Association of Fire Chiefs (IAFC) is committed to reducing firefighter fatalities and injuries. As part of that effort, the IAFC Safety, Health and Survival (SHS) Section has developed <u>DRAFT</u> "Rules of Engagement for Structural Firefighting" to provide guidance to individual firefighters and incident commanders regarding risk and safety issues when operating on the fireground. The intent is to provide a set of model procedures to be made available by the IAFC to fire departments as a guide for their own standard operating procedures development.

The draft documents are currently open for public comment until the FRI conference in Dallas (August 25-29, 2009). The reader may direct comments to Chief Gary Morris, the project lead, at mercurymorris@hotmail.com.

Background

The law enforcement and military communities long ago developed rules of engagement regarding the use of deadly force. These rules are described in short, specific terms that are easily taught and remembered. The rules define critical rapid assessments necessary to justify firing their weapons. The rules have proven to be highly successful by both of these disciplines. It is believed that a similar concept in designing rules of engagement for the fire service would prevent firefighter fatalities.

The IAFC Safety, Health and Survival Section was created in 2005, an expansion of the existing health and safety committee. Presently, the Section has more than 1,000 members and is still growing. Section members include chief officers from all types of fire departments, many of them safety officers, who are committed to reducing firefighter fatalities and improving all areas of firefighter safety. This large number of members brings a broad depth of expertise to assist in improving firefighter safety and survival.

In August, 2008, the Section agreed to develop a set of "Rules of Engagement for Structural Firefighting." A project team was created consisting of Section members and representatives of other interested fire service organizations. These included representatives from organizations such as the Fire Department Safety Officers Association (FDSOA), the National Fallen Firefighters Foundation (NFFF), the National Volunteer Fire Council (NVFC), and others. All draft material is also being shared with the IAFF/IAFC Fire Ground Survival project team.

The direction provided to the project team by the Section leadership was to develop rules of engagement with the following conceptual points:

- Rules should be a short, specific set of bullets
- Rules should be easily taught and remembered
- > Rules should define critical risk issues

- Rules should define "go" "no-go situations
- A champion lesson plan should be provided

Early in development the rules of engagement, it was recognized that two separate rules were needed – one set for the firefighter, and another set for the incident commander. Thus, the two sets of rules of engagement described in this document. Each set has several commonly stated bullets, but the explanations are described somewhat differently based on the level of responsibility (i.e., firefighter vs. incident commanders).

The Need for Rules of Engagement

Firefighter safety must always be a priority for every fire chief and every member. Over the past three decades, the fire service has applied new technology, better protective clothing and equipment, implemented modern standard operating procedures, and improved training. During this same period the fire service has seen a 58% reduction in firefighter line of duty deaths. But the country has also seen a paralleling 54% drop in the number of structure fires over the same period – thus reducing firefighter exposure to risk. With a continued annual average of 105 firefighter fatalities, the question remains – have we really made a difference with all these improvements? Or is there more that we can do?

The U.S. Firefighter Disorientation Study, conducted by Captain Willie Mora, San Antonio (TX) Fire Department, conducted a review of 444 firefighter deaths on the fireground occurring over a recent 16 year period (1990-2006). The project identified fatalities occurring in "open structures" and "enclosed structures." Open structures were defined as smaller structures with an adequate number of windows and doors (within a short distance) to allow for prompt ventilation and emergency evacuation. Enclosed structures were defined as large buildings with inadequate windows or doors to allow prompt ventilation and emergency evacuation. Research determined that 23% of deaths occurred when a fast and aggressive interior attack was made on an open structure. When fast, aggressive interior attacks occurred in enclosed structures, the fatality rate rose to 84% of the 444 deaths. Many occurred in marginal or rapidly changing conditions in which the firefighter should not have been in the building

The fireground creates a significant risk to firefighters and it is the responsibility of the incident commander to minimize their exposure to unsafe conditions and to stop unsafe practices. The fire service has always been a paramilitary organization when it comes to fireground operations. In most cases, the incident commander makes a decision and sends the order down through supervisors to the company officer and crew. Fire crews generally view these orders in a top/down direction. There is often little two-way discussion about options. Where this culture exists, crews have been trained to accept the order and do it – generally without question. While these orders may be valid, there has been little national development in basic rules that the incident commander should use to define his/her risk assessment process, an identification of too high a risk and a "no-go" decision. Furthermore, for the individual firefighter who is exposed to the greatest risk, we have not defined rules for them to follow in assessing their risks and when to say "no, this is stupid."

The rules of engagement have been developed to assist both the incident commander (as well as his/her command team officers/supervisors in risk assessment and "go" – "no-go" decisions. Applying the rules will make the fireground safer for all and reduce injuries and fatalities.

The development of the rules integrated several nationally recognized programs and principles. They included risk assessment principles from NFPA standards 1500 and 1561. Also included were concepts and principles from Crew Resource Management (CRM) and data and principles from the National Fire Fighter Near-Miss Reporting System. Information regarding Crew Resource Management and the Near-Miss Reporting System can be found at www.iafc.org and <a

The National Institute of Occupational Safety and Health (NIOSH) investigates firefighter line-of-duty deaths. A review of causes of fireground related fatalities was also conducted as part of the development of the rules of engagement.

The broad representation by Section members and representatives from other fire service organizations on this project development team provides national validity and consensus on the rules of engagement.

Document Description

Section One of this DRAFT document contains the two sets of rules of engagement in short bullet format. Eventually, the Section desires to have attractive posters designed listing the rules of engagement and make them available through the IAFC to fire departments. Also planned is a smaller "bumper sticker" style poster which can be placed on dash boards and seating positions in fire apparatus.

Section Two provides an explanation of each of the bullets for the Rules of Engagement for Firefighter Survival.

Section Three provides an explanation of each of the bullets for the Rules of Engagement for the Incident Commander.

The explanations are designed to be used as a lesson plan in teaching the rules of engagement to fire department members or to develop department standard operating procedures.

SECTION ONE

Rules of Engagement Bullet List



Rules of Engagement for Firefighter Survival

- Size-Up Your Tactical Area of Operation.
- Determine Victim Survival Profile.
- **DO NOT** Risk Your Life for What is Already Lost.
- > Extend *LIMITED* Risk to Protect **SAVABLE** Property.
- > Extend Very **CALCULATED** Risk to Protect **SAVABLE** Lives.
- ➤ Be Continuously Aware of Your Surroundings and Fireground Communications.
- You Are Authorized to SAY NO to Unsafe Practices or Conditions. Stop, Talk, and Decide.
- > You Are Authorized to Abandon Your Position and Retreat When Conditions Deteriorate.
- Never Hesitate to Declare a May-Day if Needed.

The Incident Commander's Rules of Engagement for Structural Firefighting

- Immediately Conduct, or Obtain, a 360 Degree Size-Up of the Fireground.
- Determine the Victim Survival Profile.
- > Conduct a Risk Assessment and Develop a SAFE ACTION PLAN.
- ➤ If You Do Not Have The Resources to Protect Firefighters Consider Defensive Operations.
- > DO NOT Risk Firefighter Lives for What is Already Lost Consider Defensive Operations.
- Extend **LIMITED** Risk to Protect **SAVABLE** Property.
- Extended Very **CALCULATED** Risk to Protect **SAVABLE** Lives.
- Firefighters Are Authorized to **SAY NO** to Unsafe Practices and Conditions. Stop, Talk, and Decide.
- Keep Interior Crews Informed of Changing Conditions.
- Conducted a Continuous Risk Assessment Revise the Action Plan.
- After Search and Rescue is Completed, if there is No Progress Towards Fire Control, Seriously Consider Withdrawal of Crews.
- Always Have a Rapid Intervention Team in Place.

SECTION TWO

Rules of Engagement for Firefighter Survival Explanations

Explanations

And

Lesson Plan

Rules of Engagement for Firefighter Survival

Size-Up Your Tactical Area of Operation.

Objective: To cause the company officer and firefighters to pause for a moment and look over their area of operation and evaluate their risk exposure and determine a safe approach to completing assigned tactical objectives.

All firefighters are responsible for their own safety and the safety of other firefighters working with them.

The company officer and firefighter are the point persons at greatest risk. The firefighter is also the one person in location that can best see what's happening on their side of the fireground and what the risk may be.

The company officer and firefighter must size-up their side of the fireground to determine risk and selected the safest approach to achieving objectives assigned by command.

The company officer and firefighter should not tunnel vision on the task at hand- such as focusing only on the sidewalk leading to the door. It's necessary to take a few seconds to size up the total situation within line of sight viewing.

Each side of the fireground has its own unique fire conditions and risk that must be assessed by all members.

The company officer and firefighter must listen to radio communications or reports related to fire operations. Fire conditions, or hazards elsewhere on the fireground, may quickly increase risk in your area and reduce your safety.

Determine Victim Survival Profile.

Objective: To cause the incident commander, company officer, and firefighter to consider fire conditions and determine if any victims can survive the event as part of the initial and ongoing action plan development.

Our goal is to save lives. The greater risk is taken by firefighters is based on the <u>potential to save</u> <u>lives.</u> No action plan can be accurately developed until we first determine if the victim can survive the fire conditions before rescuers reach them. If survival is not possible, a more cautious approach to fire operations must be taken

Today's fire environment is far more toxic and lethal than the past. Victims die quickly and sooner than what occurred a few decades ago. If there is no potential for survival, the action plan should be based on that determination and must reduce firefighter risk exposure.

A fire in a home in the middle of the night, with fire showing out the rear window, and modest smoke throughout the rest of the building, may allow victim survival.

A fire in the same home in the middle of the night, with significant fire showing, and dense smoke under pressure pushing out of openings, is not likely to permit any victims to survive.

A well involved structure will not allow for survival of any victims.

A well involved fire in an apartment may not allow survival in that compartment, but the survival profile may be good in the adjacent apartment(s). The action plan should extend search and rescue to the exposure apartments if safe to do so.

DO NOT Risk Your Life for what is Already Lost.

Objective: Prevent firefighters from engaging in high risk operations when all is lost.

If conditions indicate there is no victim survival, or the building is lost to fire and well involved, firefighters should not extend risk. The action plan should be to protect firefighters. Defensive operations would be appropriate.

Extend *LIMITED* Risk to Protect SAVABLE Property.

Objective: To cause firefighters to limit risk exposure when trying to save a building.

The firefighter must recognize that we cannot always save a building. Those that are lost are generally rebuilt after the fire

No building is worth the life of a firefighter. If it can be saved, <u>limited risk and careful operations</u> should be applied.

Firefighting operations must be fully supported with adequate resources and risk must be closely and continually assessed. Fire conditions must be constantly monitored.

If conditions deteriorate and become unsafe, crews must be rapidly withdrawn to a safe area and defensive operations implemented.

Extend Very CALCULATED Risk to Protect SAVABLE Lives.

Objective: To cause firefighters to manage search and rescue, and supporting firefighting operations in a calculated, controlled and safe manner during high risk rescue operations.

Our goal is to save lives. Where the survival profile indicates lives may be saved, risk should be in applied in a very calculated manner.

Where victims may survive fire conditions, greater risk, in a calculate manner, may be justified.

Where it is believed lives can be saved, firefighters may tend to push the safety envelop. Risk may be justified, but must be closely monitored and controlled in a safe manner

Rescue operations must be fully supported with adequate resources and risk must be closely and continually assessed. If resources are inadequate to maintain firefighter safety during search and firefighting operations, consider other safe approaches or implement defensive operations.

If conditions deteriorate and become unsafe, crews must be rapidly withdrawn. Defensive operations would be appropriate.

Be Continuously Aware of Your Surroundings and Fireground Communications.

Objective: To cause all firefighters and company officers/supervisors to maintain constant situational awareness of all that is happening in their area of operations and elsewhere on the fireground that may affect their risk and safety.

The firefighter is nearly always to point person working in the area of greatest risk.

The National Near Miss Reporting System lists "Situational Awareness" as the most commonly reported cause for a life threatening near miss event. The next three most reported causes of near miss events are; decision making, human error, and individual action.

Situational awareness is defined as; the level of understanding and attentiveness one has (the firefighter) regarding the reality of a set of conditions (fire conditions and fireground operations). When situational awareness is high, there are rarely surprises. When situational awareness is low or absent, "unexpected" events occur (that can injure or kill firefighters). Simply put, situational awareness is the relationship between what one perceives is happening and what is really happening.

The set of conditions that affects situational awareness can be broken down into three divisions: a lack of information, a lack of knowledge and a lack of cognition. The these three divisions are made up of their own unique factors, including misinterpreting conditions and surroundings, not

recognizing factors and cues, gathering of incomplete information, being narrow focused and being impaired.

Another "simply put" - Firefighters must be aware of their work environment and in control of their actions – ALL THE TIME!

All firefighters, for basic survival, must maintain constant awareness of their surroundings. Conditions early on in the fire attack will be out of control, placing the firefighter at continued risk. Even after the fire is controlled, the buildings structural integrity has been compromised-sometimes considerably.

Monitoring fireground communications is another area of maintaining situational awareness.

Both the International Association of Fire fighters and the International Association of Fire Chiefs support the position that ALL firefighters operating within the hazard zone must be equipped with a portable radio or other approved voice communication device.

The firefighter must maintain constant situational awareness of changing conditions in his/her area of work, AND elsewhere on the fireground. Firefighters must closely monitor all radio communications. Worsening conditions elsewhere on the fireground can quickly affect firefighter safety in all other work areas.

All firefighters must listen to all radio communications. Sometimes the company officer in charge of the crew may miss critical communications for the crew because of noise, etc.

Radio communications from other points on the fireground provide additional situational awareness about changing conditions on the fireground. Conditions will either be improving or deteriorating. Worsening conditions elsewhere on the fireground can quickly result in unsafe conditions in your area of operation.

You are Authorized to SAY NO to Unsafe Practices or Conditions. Stop, Talk, and Decide.

Objective: To prevent firefighters and supervisors from engaging in unsafe practices or exposure to unsafe conditions and allowing any member to raise an alert about a safety issue without penalty and mandating the supervisor address the question to insure safe operations.

The firefighter is nearly always to point person working in the area of greatest risk.

All firefighters are responsible for their own safety and the safety of other firefighters. Each firefighter is responsible for identifying risks and hazards and reporting them.

Supervisors are responsible for accepting reports regarding safety concerns and properly acting to ensure the safety of firefighters. This means crews should stop for a moment to assess the situation, quickly talk and report, and then decide the correct and safe response to the situation.

This item by no means suggests that a firefighter engage in insubordination. The fireground is fast paced action and clearly must be managed by a well disciplined and structured command organization. This policy statement does, however, allow a "red flag" to be raised by any member without penalty.

When the situation is questioned, the supervisor is mandated to accept that safety concern, take a few seconds to stop (assess), talk, and make a safe decision (go, no-go). In some cases, the situation may affect other areas of the fireground and must be communicated to the incident commander or other supervising officers. The policy has been successful in reducing risk to firefighters.

You Are Authorized to Abandon Your Position and Retreat When Conditions Deteriorate.

Objective: To cause firefighters and supervisors to be aware of fire conditions and cause an early exit to a safe area when they are exposed to unacceptable risk and life threatening conditions.

Firefighters are nearly always at a point of greatest risk when operating on the fireground.

No firefighter needs approval from a supervisor or the Incident Commander to abandon a high risk operation that deteriorates and becomes unsafe and life threatening. Firefighters should withdrawal and retreat to a safe location and notify the Incident Commander of the action as soon as possible, as long as it does not impede a rapid exit.

Withdrawal from a position must occur early enough to allow a safe exit from the building. DO NOT push the safety envelop and extend risk for what is already lost.

Emergency exit from a building nearly always takes longer than it took to get into the interior operating position.

Conditions can deteriorate rapidly creating life threatening conditions for the firefighter. Under these conditions the proper firefighter decision is to immediately abandon the position and exit the building. No hesitation should occur as seconds can mean surviving or dying. Seconds can make the difference.

A radio report to the Incident commander (or the division/Group Supervisor) on the decision to abandon the position should be made as soon as possible, but only when safe to do so and when it does not cause a delay in exiting.

Firefighters should not allow equipment to delay the exit. If saving the houseline will delay exit – leave it. The same for any other equipment.

Twelve firefighters died on a wild land fire on Storm King Mountain in Colorado. One of the contributing factors cited in their deaths was firefighters were trying to outrun the fire while carrying hand tools, chain saws, and backpacks. If any equipment will delay your exit to a safe area – leave it behind.

Never Hesitate to Declare a May-Day if Needed

Objective: To make the firefighter who may get in trouble comfortable with declaring a May-Day and to do so as soon as they THINK they are in trouble.

There is a very narrow window of survivability when a firefighter finds him/her in trouble. Any delay in declaring a May-Day eats into the survival time window.

If the firefighter is about to run out of air, or already out of air, he/she faces a very toxic atmosphere that will quickly incapacitate them, followed shortly by death. Declare a May-Day before you run out of air.

Do not hesitate! As soon as you THINK you're in trouble – declare the May-Day!

Also, understand that rapid intervention may not be rapid.

Research conducted by the Phoenix and the Seattle fire departments determined that it would take between 19 and 21 minutes to search, locate, and remove a firefighter from a building. This time exceeds the average time of most SCBA bottle life of air.

The research was conducted in buildings involving 5,000 square foot buildings. While Rescue time will vary depending on square footage, and complexity of the building, the point is if you get in trouble, RIT is not going to be rapid!

Understand that this research was conducted in "sterile" exercises under non-fire conditions. One can expect actual rescue times to be even longer with actual fire conditions, which involve high heat, water, with debris littering the floor and slippery conditions.

SECTION THREE

The Incident Commander's Rules of Engagement for Structural Firefighting

Explanations

And

Lesson Plan

The Incident Commanders Rules of Engagement for Structural Firefighting

Immediately Conduct, or Obtain, a 360 Degree Size-Up of the Fireground.

Objective: To cause the incident commander to obtain an early 360 degree survey and risk assessment of the fireground in order to determine the safest approach to tactical operations as part the action plan development and before firefighters are placed at substantial risk.

To keep firefighters safe, the complete fireground must be rapidly assessed before a safe action plan can be developed. This requires a quick walk around of all sides of the building by the initial Incident Commander, OR, the Incident Commander must rapidly obtain radio reports from officers on all sides of the fireground.

In some cases, the first arriving chief officer assuming command can drive around the incident building to obtain a complete 360 degree assessment of the fireground.

If barriers prevent a walk around, or drive around, the fireground, then the Incident Commander MUST quickly obtain progress reports from supervisors at all sides of the incident. This may require the assignment of crews, or an officer, to each side of the incident in order to provide critical size-up information.

Until the complete 360 degree assessment is completed, the incident commander must be cautious in the commitment of fire crews, must constantly monitor changing conditions, and be prepared to immediately adjust their commitment or withdrawal crews all together.

Investigation of firefighter fatalities has frequently identified lack of a complete 360 degree fireground assessment as a contributing factor in their deaths.

Without a 360 degree rapid assessment, the incident commander is routinely limited to a view of only one side of the fireground. Conditions are often much worse out of sight of the incident commander, thus placing the fire attack crew(s) at risk.

The initial arriving incident commander, will always be at a disadvantage regarding knowledge about the building, access to the interior, and the buildings contents.

Without on-going progress reports from all points of the fireground, the incident commander will have a very limit "picture" of what's going and the action plan will be weak and likely unsafe.

Determine Victim Survival Profile.

Objective: To cause the incident commander to consider fire conditions and determine if any victims can survive before committing firefighters to high risk rescue operations as part action plan development.

Our goal is to save lives. The greatest risk taken by firefighters <u>is based on the potential to save</u> <u>lives.</u> No action plan can be accurately developed until we first determine if the victim can survive the fire conditions before rescuers reach them. If victim survival is not possible, a more cautious approach to fire operations must be taken.

Today's fire environment is far more lethal than the past. Victims die quickly and sooner than what occurred a few decades ago. If there is no potential for survival, the action plan should be based on that determination and reduce the risk exposure of firefighters.

A fire in a home in the middle of the night, with fire showing out the rear window, and modest smoke throughout the rest of the building may allow victims survival.

A fire in the same home in the middle of the night, with significant fire showing, and dense smoke under pressure pushing out of openings, is not likely to permit any victims to survive. A more cautious approach should be taken in firefighting operations.

A well involved structure will not allow for survival of any victims.

A well involved fire in an apartment may not allow survival in the compartment, but the survival profile may be good in the adjacent apartment(s). The action plan should extend search and rescue to the exposure apartments if safe to do so.

Conduct a Risk Assessment and Develop a SAFE ACTION PLAN

Objective: To cause the incident commander to develop a safe action plan by conducting a thorough size-up, assess the victim survival profile and complete a risk assessment before firefighters are placed in high risk positions on the fireground.

The victim survival profile and 360 degree size-up will provide information on fire conditions and a risk assessment for a more accurate, and safe, initial action plan.

The action plan, and all commitment of fire crews, must place the safety of firefighters as the highest priority.

If You Do Not Have the Resources to Protect Firefighters – Consider Defensive Operations.

Objective: To limit firefighter commitment to tactical objectives that cannot be accomplished safely due to inadequate resources on the scene to support operations.

One or two fire crews, with two or three members each, cannot be expected to complete the same work as the NFPA 1710 standard recommendation of 17 members on the scene.

To conduct search and rescue, along with aggressive interior firefighting operations, with significant fire in the building, with inadequate resources on scene, places firefighters in the interior at extreme risk.

Delays in arrival of additional requested resources also create a high risk to firefighters engaged in interior operations.

If on scene resources are not adequate to effectively conduct search and rescue and control the fire, or support a RIT, limit the risk exposure of firefighters. Consider defensive operations.

The incident commander, and firefighters, must recognize we cannot always save people and buildings where we do not have the on scene resources to do so.

DO NOT Risk Firefighter Lives for What is Already Lost – Consider Defensive Operations.

Objective: To prevent the commitment of firefighters to risky operations when it is determined all is lost.

If conditions indicate there is no victim survival, or the building is already lost to fire, DO NOT place firefighters at risk. The action plan should protect firefighters. Consider defensive operations.

It is the incident commander's responsibility to control firefighters on the fireground and insure they are not engaging in independent or freelance activities that put them at risk once the incident is determined to be a defensive operation.

The incident commander, because of an exterior view, often is in the best position to determine if the fire is defensive from the outset, or if conditions deteriorate, declare it as such.

The incident commander must continuously monitor changing conditions and not hesitate to declare the fire a defensive operation and immediately evacuate crews from the building.

After ordering an evacuation of the building, or, the fire is declared a defensive event, the incident commander must conduct a "round robin" radio call to all Division/Group Supervisor and/ or fire crews to confirm they understand that the fire is defensive and that all crews are indeed evacuating the building and have done so.

Extend LIMITED Risk to Protect SAVABLE Property.

Objective: To cause the incident commander to limit risk exposure to a reasonable and conservative level when trying to save a building.

No building is worth the life of a firefighter. <u>If it can be saved, limited risk and careful operations should be applied.</u>

The incident commander and fire crews must recognize we cannot always save a building. When buildings are lost, most will be demolished and rebuilt. Limited risk is appropriate.

Firefighting operations must be fully supported with adequate resources and risk must be closely and continually assessed. If conditions deteriorate and become unsafe, crews must be rapidly withdrawn and defensive operations implemented.

The risk to firefighters continues after fire control. All buildings will be structurally compromised by fire and may be at risk to crews conducting overhaul. The atmosphere will remain toxic for some time.

Extended Very CALCULATED Risk to Protect SAVABLE Lives.

Objective: To cause the incident commander to manage search and rescue, and supporting firefighting operations, in a calculated, controlled, and cautious manner to insure safe operations during high risk rescue operations.

Our goal is to save lives. Where the survival profile indicates lives may be saved, risk should be applied in a very calculated and cautious manner.

Rescue operations must be fully supported with adequate resources and risk must be closely and continually assessed. If conditions deteriorate and become unsafe, crews must be rapidly withdrawn.

The survival profile assessment plays an important role in the tactical decision to commit to rescue operations. It must be recognized it takes time to conduct a search and complete a rescue. What appears to be a reasonable risk when the decision is made can rapidly deteriorate with time and place firefighters at extreme risk.

Once crews are committed, and conditions deteriorate, it will take time to withdrawal crews. The incident commander must stay ahead of the fire and evacuate them in time.

Don't Push the Safety Envelop.

Firefighters Are Authorized to SAY NO to Unsafe Practices and Conditions. Stop, Talk, and Decide.

Objective: To prevent firefighters and supervisors from engaging in unsafe practices or exposure to unsafe conditions and allowing any member to raise an alert about a safety issue without penalty and mandating the incident commander and command organization officers/supervisor to promptly address the question to insure safe operations.

All firefighters within the hazard zone are at the point of greatest risk. Their position allows them to observe unsafe conditions that the incident commander, or the division or group supervisor, may not see. They must be authorized to take safe corrective action

All firefighters are responsible for their own safety and the safety of other firefighters working with them. Each firefighter is responsible for identifying risks and hazards and reporting them. The incident commander must insure supervisors accept reports without hesitation and promptly act on them to ensure the safety of firefighters.

This rule by no means suggests that a firefighter engage in insubordination. The fireground is fast paced action and clearly must be managed by a well disciplined and structured command organization.

This policy does, however, allow a "red flag" to be raised by any member without penalty. When the situation is questioned, the supervisor is mandated to accept that concern, take a few seconds to stop (assess), talk, and make a safe decision (go, no-go).

In some cases, the unsafe situation may affect other areas of the fireground and must be communicated to the incident commander or other supervising officers.

Keep Interior Crews Informed of Changing Conditions

Objective: To insure that all interior crews are kept informed of all fire conditions observed from the exterior by the incident commander and other command organization/officers that may affect crew safety.

The general practice when using the incident command system is to obtain progress reports from supervisor or crews operating on the interior of the building. It is not common practice for the incident commander to provide a progress report to interior crews about exterior observations of fire conditions that may affect their safety.

In order to maintain crew situational awareness, the Incident Commander MUST keep interior crews informed of changing conditions and exterior observations. What is observed on the exterior, or what is occurring elsewhere on the fireground, may quickly increase the risk and reduce the safety of firefighters.

Interior crews have often reported moderate conditions at their location on the interior while the incident commanders (or division or group supervisors) are observing deteriorating conditions.

Crews on the interior need to know what's being observed on the exterior. Communicate!

Conduct a Continuous Risk Assessment – Revise the Action Plan

Objective: To cause the incident commander, and all command organization officers/supervisors to continually assess fire conditions and any risk to firefighters and regularly adjust and revise the action plan.

The National Near Miss Reporting System lists "Situational Awareness" as the most commonly reported cause for a life threatening near miss event. The next three most reported causes of near miss events are; decision making, human error, and individual action.

Situational awareness is defined as; the level of understanding and attentitiveness one has (the firefighter) regarding the reality of a set of conditions (fire conditions and fireground operations). Hewn situational awareness is high, there is rarely a surprise. When situational awareness is low or absent, "unexpected" events occur (that can injure or kill firefighters). Simply put, situational awareness is the relationship between what one perceives is happening and what is really happening.

The set of conditions that affects situational awareness can be broken down into three divisions: a lack of information, a lack of knowledge and a lack of cognition. The these three divisions are made up of their own unique factors, including misinterpreting conditions and surroundings, not

recognizing factors and cues, gather incomplete information, being narrow focused and being impaired.

Another "simply put" – The incident commander must be aware of all conditions and operations and control of firefighter actions and risk – ALL THE TIME!

Conditions on the fireground will be constantly changing, often deteriorating. The Incident Commander MUST conduct a continuous assessment of tactical operations, changing fire conditions, and risk to firefighters.

In order to continually assess and revise the action plan, the Incident Commander must obtain frequent progress reports from all points on the fireground and quickly revise the action plan. The Incident commander must stay ahead of the fire.

The action plan must be revised and updated based on this assessment.

After Search and Rescue is Completed, if there is No Progress Towards Fire Control, Seriously Consider Withdrawal of Firefighters.

Objective: To cause a benchmark decision point, requiring the incident commander to determine if it's safe to continue offensive interior operations, following the completion of the primary search and/or the determination that no victims are in the building

If its determined there is no lives to be saved, and the primary search has been completed, and the first wave of fire operations has not made progress on controlling the fire, operations have now entered a marginal and very risky period for the firefighter.

No building is worth the life of a firefighter. If control cannot be obtained, withdrawal crews!

Be sure the order withdrawal occurs early enough to allow adequate time for fire crews to safely exit the building.

Always Have a Rapid Intervention Team in Place

Objective: To cause the incident commander to have a rapid intervention team in place ready to rescue firefighters at all working fires.

A Fireground operation is a risky business. Always have a rapid intervention team(s) in place.

This includes compliance with the OSHA "two-in, two-out" rule for initial operations.

The incident commander must understand that it will take several RIT members to rescue a downed firefighter. Research by the Phoenix and Seattle fire departments determined that an average of 11–12 members to rescue a downed firefighter. Additionally, it took an average of 19-21 minutes to complete a rescue.

