

**Comparison of the Sylvania Township Fire Departments RIT and Mayday
Procedures to the National Standard**

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CERTIFICATION STATEMENT

I hereby certify that the following statements are true:

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ABSTRACT

The purpose of this paper is to recommend a standard operating procedure for Rapid Intervention Team (RIT) and Mayday. The problem that prompted this research is the Sylvania Township Fire Department does not follow the national standards for RIT and Mayday.

The research questions were:

- 1) What are the national standards for manpower and resources to operate a RIT on the fire ground?**
- 2) Does the "Save Your Own" training by the STFD meet the national standards?**
- 3) When should a firefighter call Mayday?**

Action research was the methodology. Results of the study show the policy's importance. Recommendations are that the STFD should follow the national standards for RIT and Mayday.

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INTRODUCTION

Statement of the Problem

The establishment of a Rapid Intervention Team (RIT) and Mayday procedure as a standard has become very important to the Sylvania Township Fire Department. Unfortunately there have been a number of tragic losses of firefighters across the nation in recent years. Firefighters have been killed or seriously injured while operating at an incident with an IDLH (Immediate Danger to Life and Health). The researcher remembers at least two fires in recent time that have had loss of life or serious injuries to firefighters: the Worchester, Massachusetts warehouse fire where six firefighters were lost; and the Everson Street fire in San Francisco where one firefighter lost his life, one firefighter was permanently disabled, and two other firefighters were seriously injured. With two tragic events in memory it led this researcher to the question: Is the Sylvania Township Fire Department (STFD) doing enough to protect firefighters in their ever-dangerous profession?

By the standards designed by The National Fire Protection Agency (NFPA) the establishment of a RIT team would allow for no less than two but preferably four firefighters ready and equipped at all incidents that have firefighters in an IDLH environment. The RIT firefighter's sole responsibility would be at the ready to rescue the downed firefighters. The RIT would be notified of the need for their assistance by the call of a Mayday by the downed firefighter or a firefighter that has found a downed firefighter. Mayday is presently communicated by radio traffic and by sounding of horns outside the structure.

Fire fighters need to be aware of the dangers they face at a fire scene. They must be able to recognize the dangers that confront them and take the action necessary to protect them. When arriving on a scene, a firefighter should determine the dangers he or she may have to face. Some

of those are: Firefighters who are tangled, pinned or stuck, who have fallen through a roof, or floor, who are caught in a flashover, who have zero visibility and no contact with a hose or lifeline, whose primary exit is blocked, or has a low alarm activation, these are just some of the situations that may warrant a Mayday call.

The Sylvania Township Fire Department has adopted some very basic training on the implementation of a RIT and the calling of a Mayday. During some training exercises some of the new techniques have been tested. Some of the new techniques trained on are to give a firefighter a way out of a structure should he find his partner and himself trapped. At the present time there is no plan in place for implementing any of these techniques at a live incident.

The Sylvania Township Fire Department has not put a high enough priority on life safety. At the present time we do not have these procedures in place. The STFD has not utilized the system known as RIT or Mayday on any incidents with an IDLH. This is a sign that we have not followed the national standards. It shows that we are late in our researching, developing and implementing these needed standards. By researching the national standards, a direction can be set to begin the implementation of the standards by the STFD. Not having used any of these standards allows for a clean

At the present time the STFD does not have either of these procedures in place. After researching the latest information, I have found ways that we can develop and maintain our own procedures. The searching the latest information we can develop and maintain our own procedures. The information found indicates that it is very important for life and safety of every firefighter working in an IDLH environment to have a safety standard to be followed. This paper will show the significance of the RIT and Mayday policies that will be implemented by the

STFD. By researching the national standards and providing a comprehensive policy to the chief we will be able to have an impact on the safety of the crews.

Purpose of the Study

The purpose of this study was to help the STFD with the writing, development and implementation of these needed procedures. The need for these procedures is two fold. First, the department needs to have a procedure in place that will set some guidelines and provide some direction for firefighter safety on emergency incidents. The second of these procedures will enable the firefighters to have a safe and effective way to assist a downed firefighter through guidelines and standards in training. By having these procedures in place, there will be a standard set of guidelines. The fire ground is a very unstable environment requiring guidelines to be in place for the rescue of a downed firefighter.

Research Questions

The research questions this study investigated are:

1. What are the national standards for manpower and resources to operate a RIT on the fire ground?
2. Does the "Save Your Own" training by the STFD meet the National standards?
3. When should a firefighter call Mayday?

These questions will be addressed and studied using information that will be obtained through action research methodologies. There are several perspectives on the importance of ultimate safety on the fire ground for crews that may be operating in the unstable fire/rescue environment.

BACKGROUND AND SIGNIFICANCE

The STFD is a combination department that employs 64 full time firefighter/paramedics and 15 part paid firefighters. The full time crews work a 24-hour on and a 48-hour off schedule throughout the year. On a regular shift the department operates (3) ALS (Advanced Life Support) engines, (1) ALS Ladder and (1) Life Squad (ALS Transport Vehicle). At anytime during the day, (4) chiefs operate out of command vehicles. The STFD responded to over 3000 incidents in the year of 2002. Firefighter safety has been, and should always be, a priority for the incident commander. By following the ICS (Incident Command System) the command officer holds the safety of the crews as a high priority. The research that was performed will enable the department staff to implement the standards that will impact every fire incident that we respond to. The safety of the crews is paramount and by implementing the national standards we will make a statement in the lives of every person that is involved with the STFD. By having these standards in place a life may be saved, a father will return to his family. Continuing to improve the standards that the STFD operates under will greatly improve the department in unknown proportions. We all know that we cannot put a price tag on life so to say that a RIT team would make a difference is undeniable. The study will show just how far away we are, as a department, from giving the crews all of the tools possible to create that coveted sense of safety on the ever increasingly dangerous incidents that we respond to. The lack of a RIT has put a special burden on all of the people in charge of incidents. By having the standards in place the commanders will have the security of knowing if something does go wrong we will have in place the ability to retrieve a downed firefighter.

LITERATURE REVIEW

What are the national standards for manpower and resources to operate a Rit on the fire ground?

By reviewing all of the research questions we will have a better understanding of the STFD's non-compliance with the national standards on RIT and Mayday operational procedures. Firefighters are surely going to find themselves in precarious situations everyday. The Fire Chief's Handbook states "nowhere else are the rescue skills of firefighters more important than when their colleagues become lost, trapped, or injured at the scene of a rescue or on the fire ground." (Robert C. Barr, 2003, p. 607-610) As we have seen the following arguments will show the several differences of opinion on the manpower needed for a RIT team. Norman (1997) wrote, "There has been a concerted effort to reduce firefighter deaths over the last twenty years with some successes-deaths are down from highs of 140 deaths per year in the 1970s to around 100 deaths per year in the 1990s." By setting the standards to follow what the National Fire Protection Agency (NFPA) states will require the department to provide a RIT for the rescue and safety of all crews. The fire service is a risky business everyday of the week. In the NFPA handbook, Teele (1993) stated, "that firefighters are most exposed to the risk of death or injury at emergency incidents and that using RIT's is an effective mechanism to reduce this risk." Teele (1993) further states, "case studies have repetitively shown that when members learn of others in distress, everyone rushes to assist at once, causing confusion and a lack of a coordinated effort. RIT's can be called immediately with their only mission to rescue personnel in trouble." In 1995, the NFPA passed the, Standard 1561, Fire Incident Management Systems. Chapter 4 – 1.8 states that fire departments shall provide personnel for the rescue of individuals operating at emergency incidents if the need arises. On initial arrival NFPA 6-5.2 states "A rapid

intervention crew (RIC) shall consist of at least two members and shall be available for rescue of a member or a team if the need arises. Rapid intervention crews shall be fully equipped with the appropriate protective clothing, protective equipment, SCBA, and any specialized rescue equipment that might be needed given the specifics of the operation under way.” By not following these standards the STFD has put the crews at a disadvantage for protecting the safety of all persons at an incident. The National Fire protection Agency standards and guidelines 6-5.5 recommend “As the incident expands in size or complexity, which includes an incident commander’s requests for additional resources beyond a fire department’s initial attack assignment, the rapid intervention crews shall upon arrival of these additional resources be either one of the following

- (a) On-scene members designated and dedicated as rapid intervention crews
- (b) On-scene company or companies located for rapid deployment and dedicated as rapid intervention crews.”

The NFPA standards and guidelines recommend that you implement a RIT with no less than four firefighters whose only concern is that of being next to the incident commander with all the equipment they need and being ready to enter the incident to rescue any downed firefighters that may call a Mayday. Crew members that are in trouble either by being lost or trapped can make a radio communication for help, which is called a Mayday. Team members must be able to function under extreme stress and pressure. They must base their tactical decisions on sound training and experience and maintain their focus on locating, assessing, and extricating their fellow firefighters (FEMA, 2003). It is common knowledge the higher our adrenalin is the harder it is to accomplish the task of finding our fellow firefighters. When a Mayday sounds it sends everyone into a state of wanting to help to find the downed or injured firefighter.

Crawford (1998) wrote, "Time is life. We are all well aware of the importance of time when it involves the rescuing of one of our own on the fire ground. Any shortcut we can take to quicken the removal of a trapped firefighter and maintain a margin of safety for the rescuers will ultimately increase the firefighter's chances of survival." The four essentials to a successful RIT operation are: people, policies, training, and tools (Norman, Sept. 1998). Our people are our most valuable resource on the fire ground. These resources must be pre-assigned and made available at every fire emergency. The RIT crew should always report to the IC on arrival for assignment. The crew should always be prepared to enter the structure on arrival, this means they should be in full turnout gear with SCBA'S (Self Contained Breathing Apparatus) in place. The crew must have all their tools ready to go. Tools are one of the greatest resources to getting the job done for a RIT on the fire ground. The RIT team should report to the IC (Incident Command) and have in its possession:

1. SCBA with an activated PASS device
2. A large flash light on a strap
3. Sharp knife
4. Spare SCBA / Or RIT Pack
5. 40' of 3/8" nylon rope (Norman, Nov 1997).

Realizing that the first twenty minutes of a structure fire usually prove to be the most dangerous for those on the fire ground the tools and crews must be in place early (Crawford, 1998). This makes the importance of the RIT team available to the IC on arrival crucial for the overall safety of the crews.

An effective RIT requires personnel experienced in forcible entry, laddering, search, and other truck company duties. Although all firefighters should be competent in engine and ladder work, the fact remains that members of truck, and rescue squad companies perform these tasks routinely and are usually more proficient in them. In addition, they carry the tools and equipment necessary for the freeing and removing entrapped firefighters. (Fredricks, 1999) Possession of these tools will allow the RIT to go to work immediately when called. Placement of the tools will be in an area called the RIT staging area. The tool staging area will be a designated area for the placement of all the necessary tools. A tool staging area should be established by first laying a tarpaulin on the ground for tool placement (Crawford, 1998).

N.F.P.A. 1500 outlines the requirements for Rapid intervention for the rescue of fire department members. It requires a fire department to provide personnel for the rescue of fire fighters at an emergency scene (1997, 6-5.1). The team will consist of at least two members in fully protective gear including SCBA (NFPA, 1997, 6-5.2). The structure of the team should remain flexible allowing the IC to determine the need for one or more RITs based on the operations at the emergency scene (NFPA, 1997, 6-5.2).

During the early stages of an incident, the RIT can consist of on scene members performing other duties but they must be able to redeploy as a RIT (NFPA, 1997, 6-5.4). As the incident expands in size or complexity a RIT needs to become dedicated to the incident (NFPA, 1997, 6-5.5). Additionally, whenever members are engaged in an operation that subjects them to immediate danger of injury, at least one RIT should be standing in the ready (NFPA, 1997, 6-5.6).

Once additional personnel arrive, a designated R.I.T. team of four (4) shall be established. (Sendelbach, 2002, pp 1-15). One of the two individuals located outside the IDLH

atmosphere may be assigned to an additional role, such as incident commander in charge of the emergency or safety officer, so long as this individual is able to perform assistance or rescue activities without jeopardizing the safety or health of any other firefighter working at the incident. (Sendelbach, 2002, pp 1-15). The initial team can only be realistically expected to locate and secure the lost firefighter. (Baird, 2003, pp 1-2)

Does the “Save Your Own” training by The STFD meet the national standards?

The STFD has done limited training on firefighter safety. The training that has been done is not what the standards recommend. Some basic ladder bailouts have been demonstrated. Some crews have attended schools on their own and brought back to Sylvania what they have learned but nothing has been implemented as far as standardized training.

Training is a very important daily component of firefighting. This may be one of the most overlooked areas in the service today. The responsibility of the training falls into the hands of many people in the department. A daily set of training exercises is a must to keep all of the crew members on the ready for a Mayday. Lambert (1997) stated, “For a rapid intervention team or any policy to be effective, it must be included in the department training program. This training should include the purpose of the rapid intervention team and search techniques.” Training is the key to success in rapid intervention team operations. Thankfully, firefighter rescues are not occurring on a regular basis but they do happen, and when you least expect it. Being prepared is the most important thing you can do for your firefighters. Ultimately, no one is coming in for us! (Crawford, 1998, p.63)

As with any operational endeavor, training must be an integral part of any plan. Norman (1997) states, “some of the most important steps that can be taken to prepare a members [sic] of

rapid intervention team (RIT) for the tasks they may have to perform are to establish standardized tool assignments and practice common removal techniques” Specialized assignments are one way of preparing each member of his duty when a Mayday is called. (p. 18). Lund (1999) said, “In our case, battalion-wide familiarizations should be practiced on a regular basis several times a year if this rapid intervention is going to be successful” (p.86). Continuing to have all members on the same page with training is as important as the RIT itself. Cline (1999) wrote, “it is obvious that to comply with the Final Rule, training is necessary. Training, training and more training is the key to success in effective two-in/two-out operations” (p.8). Two-in/two-out suggests that if two firefighters are inside an IDLH environment then there must be two ready to go in and rescue the downed or injured firefighters.

The NFPA strongly suggested specific subject areas where training is needed for RIT’s. These subject areas should include team search techniques with guide ropes, familiarity with the usage of tools and specialized equipment, survival training, and building construction. We can use large simulators such as open warehouses to get the crews disoriented and have them use their instincts to get themselves out. This can be done in a manner that will minimize unnecessary danger. The crews will feel safe during these exercises knowing they have training personnel on hand helping them with all the techniques. Also, by knowing they are not in a true IDLH environment they will still have a RIT crew on hand to assist if a problem does exist. This will give the members an opportunity to try new ideas for orienting themselves. The whole time this training is being done we should have a RIT ready to go into the structure to retrieve the crew that is training should a true emergency occurs.

Disorientation is the second leading cause of fire ground deaths, behind cardiac arrest. (Nasta, 2003, pp20-22) The added stress of being lost puts undue stress on the cardiac muscles

of the heart by causing both significant rises in blood pressure and heart rate. Disorientation is the loss of a sense of direction experienced by firefighters when searching in a smoke-filled room. (Dunn, 1992, 339)

Orientation is a very important piece of training that will allow us to significantly increase the chances of saving our own. This teaches you to orient yourself with your surroundings; enhances your ability to save our own; take matters into your own hands, find your own way out if you are physically able; make sure your pass device is activated in the open mode. The pass device is a noise making device than is activated manually or by the downed firefighter not moving for thirty seconds. The sound that it makes is ear piercing helping the RIT to locate the firefighter. Some of the orientation practices that this will teach the crews are: following the cracks in the concrete floor to the nearest wall and to find an exit; getting oriented by taking items from pockets, throwing them in all directions and then following the noise when an item hits something; and listening for noises such as radio traffic, or the sound of the fire engines running outside. Each crewmember is also equipped with a portable radio that will allow them to transmit to the incident commander that they need assistance along with their location if they know where they are. It is up to the incident commander to give the RIT team an idea as to where the crew may be. Confidence training is also stressed in the updated "Save Your Own" training. Psychological and physiological problems do occur in this field in order to become proficient in the use of an S.C.B.A. (self contained breathing apparatus). A firefighter needs to be able to handle and overcome any of the psychological and physiological barriers he may encounter/ experience... Psychological barriers include simple hyperventilation during stressful or complicated operations that may lead to dizziness and/or lightheadedness. Physiological barriers include an episode of claustrophobia due to the unusually tight working

conditions. S.C.B.A. confidence training takes time and each individual must be allowed to progress at an acceptable pace to ensure these barriers are identified and overcome successfully. (Baird, 2003, pp 2) Competency based skill training is a must to make all fire crews work on the same level of training. This training has four critical actions that must be met to accomplish the training: 1. Remain calm 2. Notify your partner/command 3. Activate your pass alarm 4. Search for/find an exit. With that in mind, some of the proficiency things that we must train on are face piece removal, air supply stoppages, early low-pressure alarm activations / decreased air flows, depleted air supplies, cracked, broken or damaged face piece lenses, ripped or severed air supply hoses, air from regulator discharging uncontrollably, and audible leaks from hose connections at the cylinder connection. (Baird, 2003, pp2-3) Our training for these situations does not always need to be brute strength type of training. A large percentage of problems that we encounter on the fire grounds are caused by communication.

Training continuously and realistically in both “routine” and not so routine fire ground operations...physical strength and endurance training to help firefighters withstand the punishment of firefighter rescue operations; and developing mental toughness so that one can withstand the emotional rigors of firefighter rescue efforts – especially if they are unsuccessful. (Fredricks. 1999, p.82). This shows the importance of daily training on the basic and not so basic aspects of the fire service. The point of how important the training of each member really is.

Many departments are implementing policies, guidelines, and procedures pertaining to the RIT but are failing to train their personnel in this area. It’s not uncommon to hear an officer or firefighter say, “we have a rapid intervention team policy, but we’ve never been trained on how to use it. (Laskey, 1997, p. 17)

When should a firefighter call Mayday?

When we have a lost or injured firefighter is the time to call. We all need to know the universal signal from the communication stand point. The time to act is now, not when a “Mayday” comes over the radio. The best word in firefighting is prepared, always be prepared. Prepare for the worst-case scenario and hope that the extra help is not needed. (Eisner, 1997 p.7)

When a “Mayday” is sounded across the radio it notifies all firefighters on the fire ground that a Mayday has been called. Crew members having their own portables will be able to hear the downed or injured firefighters Mayday call. The broadcast opens up the channels to keep it clear so that the member that is lost or injured can make his call to the incident commander for a possible RIT team entrance to find the downed fire fighter. As with any incident, effective fire ground communications are paramount for the successful management of a fire ground “Mayday!” (Sendelbach, 2002, pp 1-9). The delay in calling a Mayday may be caused by many factors, but three needs to be addressed immediately: 1. the stigma associated with admitting to yourself and letting others know you need help, 2. not having been given clear rules for calling a Mayday, and 3. the manner in which the fire service makes decisions. (Clarke, 2003, pp 85-89)

A firefighter must call a Mayday when they find themselves in a situation of distress. Captain John Norman, with the FDNY, suggests that three steps can be taken to reduce fire fighter deaths and injuries:

1. Improve hazard awareness
2. Provide emergency escape or self rescue ability
3. Provide rescue capability: rapid intervention teams” (Norman, July 1998, 18)

Make sure that Mayday decision-making parameters have been clearly established. Fighter pilots are given clear, specific ejection parameters (rules governing when to eject) and they are trained and retrained on making the ejection decision and drilled on actually pulling the ejection cord several times a year. (Clarke, 2003, pp 85-89) What does this really mean? This statement means we need to be as prepared to call a Mayday as that fighter pilot is to save his life by ejecting from his aircraft. Just imagine you are trapped under a floor that has just collapsed and pinned you so that you cannot move, are you trained in the proper procedure to call a Mayday so that the RIT team can come in and find you? I hope so. If we do not prepare ourselves and train on when to call a Mayday we are preparing ourselves for a life safety disaster. Live training sessions on when to and how to call a Mayday, will better prepare the crews for the real thing. As has been said, the fire service has had an over inflated sense of confidence that they will always be able to get themselves out of any situation. Few if any firefighters could ever fathom the possibility of needing to rescue one of their own. (Sendelbach, 2002, 1-8) Fire service building construction veteran, Francis Brannigan, once said,

There is no substitute for the fire department developing a system of accumulating and organizing information for retrieval at the time of the fire. This situation is analogous to military intelligence. It is vital to know the disposition of the enemy.

Knowing your enemy is a rule every firefighter and fire ground commander should live by. No fire ground can ever be made entirely safe, but it goes without saying, if we know the enemy up front the odds of winning the war are dramatically increased in our favor. (Sendelbach, 2002, pp 1-9) John "Skip" Coleman, a deputy chief for the Toledo, Ohio Division of Fire and Rescue writes, "When do you call for a Mayday?" Well! That's not a simple question, nor can it be answered with one simple reply. To my way of thinking, you should live by the adage, "If

you're going to err, err on the side of safety." In other words, all too often, about the time you begin to realize that you're "really in trouble," it may be too late. Decisions sometimes must be made in a split second. (Coleman, 2003, 104-105) Skip brings a new thought process to all of us based on his own personal experience. In conversation with Skip about his own experience with being an always-prepared type of firefighter it sank in how important He denied he had chest pain long enough that it almost killed him. This might not be relevant to the fire scene, but it does bring to light the thought process of the breed we call firefighter. If someone with the knowledge and background that Skip has doesn't even know when to call a Mayday to save his own life, then how important is it that we get the point across to all of the new recruits and even the crews that have some time on the force that it is ok to call a Mayday. We are human and humans die from all types of situations that we get ourselves into. By studying the policy and procedures of fire departments, having an SOP (Standard Operating Procedure), SOG (Standard Operating Guideline), or guidelines implemented to guide when and why to call for a Mayday appears to be imperative. Practice calling Mayday will make calling for one academic; such as the fighter pilot ejecting. At the training academy, every time you have live-fire training, it places crewmembers in a situation in which they must make the Mayday decision themselves.

Mayday training will also desensitize the others on the operational team to the Mayday call so they can continue fighting the fire instead of abandoning their assignment to go to the aid of the downed firefighter. We cannot rely on fire ground experience to teach us when to call Mayday; therefore, we must simulate this lifesaving skill often. Like all safety equipment or SOP's, the most important component is the firefighters themselves. Just as you have to put on your seat belt to have it protect you in an accident, you have to call a Mayday for the RIT to come and get you out. (Clarke, 2003, pp 85-89)

PROCEDURES

The researcher began this research while a student at the Ohio Fire Executive Officers academy in June of 2003. The goal of this research was to help the STFD with the writing, development and implementation of a RIT and Mayday policy. Collective data was gathered using various types of information gathering methods. The research method utilized is the action methodology. The National Fire Academy, Learning Resource Center (LRC) enabled this researcher to rapidly acquire various sources on the subject of Rapid Intervention Teams. By using the search engines on the computer, it enabled the findings of trade journal articles, periodicals, and LRC research papers related subject matter material to be documented. This also helped to identify critical points to cover so that a meaningful RIT policy could be developed and implemented in the STFD. The action research was used to attempt to improve or even to solve the problems of firefighter safety with the implementation of a RIT policy. The study was acquired from 25 departments similar in size as the STFD enabling a good basis for the policy and procedure development. The study asked for them to send a copy of their current SOG on RIT and mayday. The study also asked three specific questions: 1. Do you follow the national standards for manpower for your RIT, or do you operate a RIC? 2. How often does your RIT train? 3. When does your department call a Mayday? The results were that eighteen departments currently have a SOG that covers RIT and Mayday, fifteen departments currently operate a RIT at all IDLH incidents. Twelve departments answered they operate RIT, 6 operate a RIC until further manpower and equipment become available. Twelve departments advised that they have regular weekly training on RIT and Mayday. The departments that have a policy sent them to the researcher and the information was used to compare the policies of these

eighteen departments with the policy that was written by the researcher. Seven departments failed to answer the request of the researcher. A copy of this request is presented as appendix 3.

The research was done to help make the researcher more knowledgeable about the development of a policy for RIT and Mayday. With all of the information researched it will help in the development and implementation of the SOP and the Department policy. As all policies need to be reviewed and implemented by the fire chief this policy will be implemented as all policies are for the STFD. First it is presented for review by the chief. Second the chief sends back his recommendations for any changes that need to be done. Third a time line for implementation is set; usually the policy goes into effect within 90 days of the final approval of the fire chief. A time trial is set, usually 6 months, to review its outcome. Fourth, 12 months after it has been implemented it is again reviewed for its effectiveness and to make any changes that need to be made. This policy will be to assign personnel during fire ground activities for the purpose of rescuing firefighters in trouble. The policy will follow as appendix 1.

Definition of Terms

Advanced Life Support (ALS). Highest level of emergency care in the field performed by paramedics under Emergency Medical Physician supervision. (Mosby's paramedic Textbook 1994)

Federal Emergency Management Agency (FEMA). The Federal Agency in charge of investigative reports for the U.S. Fire administration. ()

Incident Commander (IC). The officer at the top of the incident chain of command and is in overall charge of the incident. (Essentials Of Fire Fighting 1998)

Incident Command System (ICS). The system that has a number of interactive components that provides the basis for clear communication and effective operations. (Essentials Of Fire Fighting 1998)

Immediate Danger to Life and Health (IDLH). An advanced fire that has spread inside of a building where high temperatures, heat and dense smoke are present. (OSHA 2003)

Learning Resource Center (LRC). The U.S. Fire Administration National Emergency Training Center Learning Resource Center. (.2004)

National Fire Protection Association (NFPA). A committee of fire service experts that set standards for the fire service. (Dunn 1992)

Personnel Accountability Report (PAR). The report that all participants are accounted for (Fire Engineering, April 1999)

Rapid Intervention Crew (RIC). A dedicated group of fire fighters assigned the responsibility for immediate intervention in situations to include, but not limited to, locating trapped, lost or downed fire fighters and removing them to safety and other life-supporting activities as determined by Command. (Virginia Beach Fire Department 2003)

Rapid Intervention Team (RIT). The function of the RIT is to locate and rescue lost, trapped, and/or injured firefighters on the fire ground. (FEMA 2003)

Self Contained Breathing Apparatus (SCBA). Protective breathing apparatus (Essentials Of Fire Fighting 1998)

Standard Operating Guidelines (SOG). A guide to decision making within an organization. (Essentials Of Firefighting 1998)

Standard Operating Procedure (SOP). A predetermined plan for nearly every type of emergency that they can conceive of occurring. (Essentials Of Firefighting 1998)

LIMITATIONS

The research and analyses were limited to the text and fire service articles that were read and reviewed by the author, the time limit was for completion and submission was 11 months by The Ohio Fire Executive Program. With RIT and Mayday being relatively new in the area the lack of area wide and individual SOG's or SOP's was also a limiting factor.

RESULTS

1. What are the National Standards for Manpower and Resources to operate a RIT on the Fire ground?

The study of the eighteen departments that answered the study determined that the manpower resources on an IDLH incident for a department similar in size to that of STFD are maintained by fifteen of the answering departments. This clearly shows that the STFD is not maintaining the national standard by not providing any type of manpower at any incidents of IDLH for RIT.

NFPA 1500 (1997) 6-5 Rapid Intervention for Rescue of Members covers the NFPA standard for Rapid Intervention Teams (RIT), although they refer to the RIT's as Rapid Intervention Crews (RIC). First the standard states the fire department shall provide personnel to rescue fire fighters working at an emergency scene (1997, 6-5.1). The team will be made up of at least two members fully equipped and protected with appropriate protective clothing SCBA. These team members must be available for the rescue of fire fighters in need (1997, 6-5.2).

NFPA 1500 6-5.3 allows the composition and structure of the team to remain flexible to enable the IC to first evaluate the emergency scene and then decide the makeup and number of

teams needed for a given situation (1997). Additionally, the standard views the assignment of the team in two phases. First, during the initial stages of the incident the RIT is allowed to perform other functions on the fire ground as long as they are able to leave these functions to perform a rescue. The only restrictions on this is that when they discontinue the assigned function it does not jeopardize the safety of those on the fire ground and that they can be deployed immediately (1997, 6.5.4). The second phase goes into effect when the incident expands in complexity or is considered beyond its initial stages. In these situations a dedicated RIT needs to be assigned and made up from on scene members or companies (1991, 6-5.5).

At least one team needs to be standing by and properly equipped while other department members are performing special operations or are in a position that equipment failure or a collapse could cause immediate danger or injury (1997, 6-5.6). The standard, in section A-6-4.3, invites those looking for additional information to refer to 29 CFR 1910.134 "Response to IDLH or Potential IDLH Atmospheres." (1997). NFPA feels that four (4) fire fighters should be assembled on the fire ground before an interior fire attack should take place. By having a minimum of four (4) fire fighters on scene two (2) fire fighters can be in the structure conducting interior attack, the other two (2) fire fighters are out of the structure maintaining the ability to rescue the fire fighters in the structure (NFPA, 1997, A-6-4.4.2). The exception to this rule is when a fire fighter(s) must enter a structure to eliminate a life threatening situation before the arrival of four (4) fire fighters on scene (1997, A-6-4.3).

2. Does the "Save Your Own" training by the STFD meet the national standards?

No. The training being conducted by the STFD has not been geared toward saving our own. Basic training has been performed in the event that you need to save yourself by ladder

bail outs, rope bail outs. This training will be shown to be way below the national standards. The study showed that of the departments that responded twelve train on a weekly basis on the save your own training. This clearly shows that the STFD is not performing the needed training to adequately protect the safety of the crews on an incident. The literature clearly demonstrated that training was a major component for the successful implementation of any RIT policy or standard. Lambert (1997) stated, "For a Rapid Intervention Team or any policy to be effective, it must be included in the department training program. This training should include the purpose of the Rapid Intervention Team and search techniques." Training is the key to success in Rapid intervention team operations. Thankfully, firefighter rescues are not occurring on a regular basis but they do happen, and when you least expect it. Being prepared is the most important thing that you can do for your fire fighters. Ultimately, no one is coming in for us, but us! (Crawford, 1998, p.63)

Training continuously and realistically in both "routine" and not so routine fire ground operations...physical strength and endurance training to help fire fighters withstand the punishment of fire fighter rescue operations; and developing mental toughness so that one can withstand the emotional rigors of fire fighter rescue efforts- especially if they are unsuccessful. (Fredericks. 1999, p.82) The emotions that are felt by everyone when a RIT needs to go into action are increasingly higher especially if the rescue attempt is not a successful one. By meeting the standards for the save your own training the STFD is not prepared.

Many departments are implementing policies, guidelines, and procedures pertaining to the RIT but are failing to train their personnel in this area. It's not uncommon to hear an officer or fire fighter say, 'We have a Rapid Intervention Team policy, but we've never been trained on how to use it. (Laskey, 1998. p.12)

3. When should a fire fighter call a Mayday?

All of the departments that responded to the study stated that they have similar decisions that need to be made when calling for a Mayday. All firefighters are said to be able to call for a Mayday when they deem it necessary for help to come for them. A radio communication is broadcast and an approximate location should be sent to command. A Mayday should be reserved for situations where continued presence in the environment would result in serious injury or death. Fire fighters do not like to admit that they might need to be rescued. (Clarke, 2003, p.85) The lack of an effective Mayday policy has been shown to contribute to the deaths of fire fighters. Figures 1 and 2 show that the highest percentage of fatal injuries is when fire fighters find themselves over exhausted, caught /trapped, or when it is too late to call a Mayday which is demonstrated by the asphyxiation, and burns/asphyxiation.

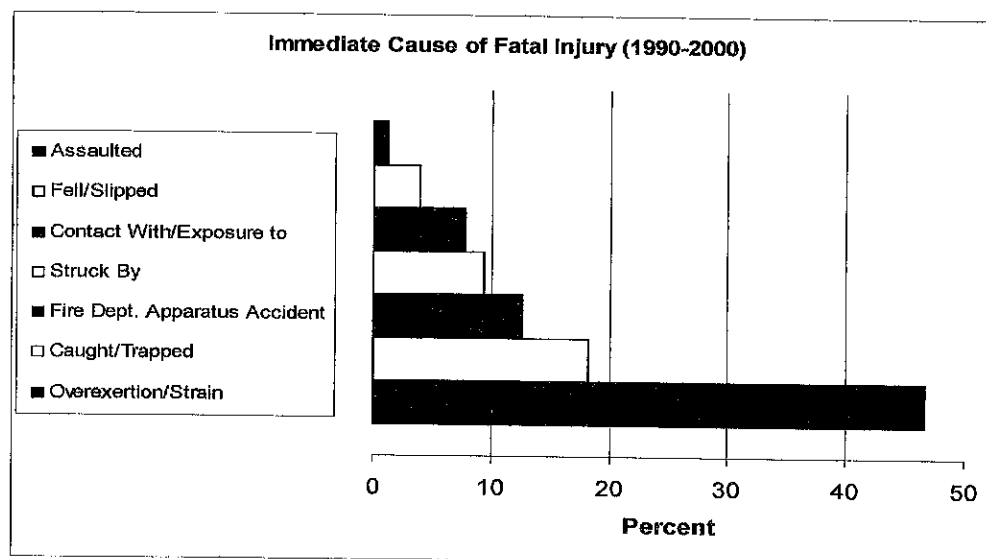


Figure 1.

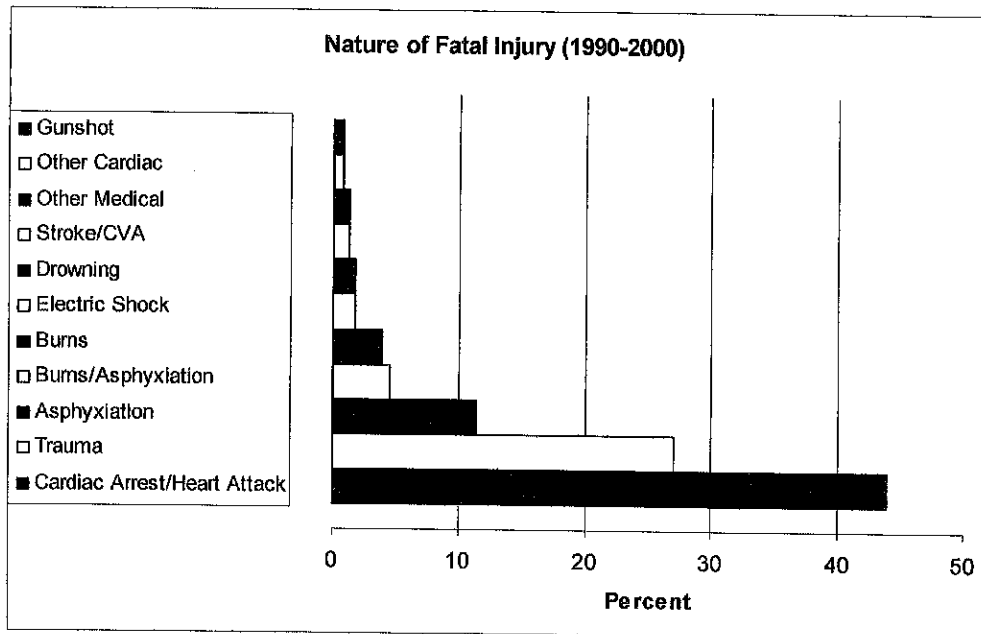


Figure 2.

Mayday must be called without delay to give the downed firefighter all the chance to survive in the IDLH environment. The delay in calling a Mayday may be caused by many factors, but three needs to be addressed: (1) the stigma associated with admitting to yourself and letting others know you need help, (2) not having been given clear rules for calling a Mayday, and (3) the manner in which the fire service makes decisions. (Clarke, 2003, p.85) Dr. Clarke has made reference to the stigma with admitting that you could be lost and that you need help which is a big hurdle to get the proud firefighters to overcome. Each firefighter feels he can get himself out of any situation and must be made aware of how important an early call for a

Mayday may save his or her life. Being proud is one thing but being dead is the ultimate sacrifice. The need to have the standards in place is also conveyed by the Dr. If each member knows the when to and how to call for a Mayday there should be no reason to not call for one. The fire service is one that has to have all the facts straight before it will make decisions. The fire service has no room for error so all things considered making a decision must be based on hard facts and findings before it can be implemented.

DISCUSSION

The purpose of this research paper is to recommend a policy that establishes standard operating guidelines for a RIT and Mayday for the STFD. The STFD should have in place a procedure to quickly locate and remove trapped fire fighters. The findings of this research are consistent with the findings and opinions of other writers: fire departments should utilize a RIT at all IDLH incidents. The STFD does not operate a RIC/RIT on any incident. There is no policy on RIT/Mayday for any IDLH environment. The incident commander would have to break another crew away from their assignment to perform what we might think of as a RIT to assist with any firefighter in need. One author wrote, "The importance of a written SOG that outlines a standardized and predictable response cannot be overstated. If your fire department does not have such a SOG, develop one quickly." He further states, "Time is critical. Every fire fighter on the fire ground must be able to react decisively and quickly to a report of a missing firefighter. Quick and decisive action cannot occur without SOG'S and training." (Morris, 1996) Time is the undeniable factor that we all must be concerned with. By not following the national

standard we are definitely putting our personnel in an unsafe position every time they enter an IDLH environment.

The study further shows that there is much more to RIT's than having two firefighters outside the fire building waiting to rescue those working inside the building. Training department members in RIT responsibilities, basic survival skills on the fire ground, the RIT concept and the related SOG's are all interrelated when attempting to provide a successful rapid intervention program.

Robert Cobb believes one of the reasons fire fighters are being injured and killed during initial stages of a fire are because of building construction features and the lack of fire fighter survival training (1998). The departments are responsible for the training and to keep these training sessions up to the national standards. (Cline, 1995) stated, "that incident commanders of fires where multiple fire fighters lost their lives, thought the incident was routine until something went wrong." Routine is a word that should never come into play in the fire service. The members of the Memphis Fire Department found that out one night when they used the elevator to check on an alarm in a building where they had hundreds of false alarms at. When the elevator door opened they were overcome by smoke and heat and did not realize that their whole crew did not get on the elevator. The disregard for safety and thinking everything was routine caused firefighter fatalities that evening in Memphis. Fires are never routine, we must plan and practice for the unexpected. Fire fighters need to improve their awareness of the hazards that are present on the fire ground in a given situation (Norman, 1997). Fire fighters need to limit the amount of times they put themselves in harms way, based on the life hazard and occupancy. Being able to extricate oneself from a building is a very important survival skill (Norman, 1997). These skills are very important and need to be taught to everyone on our department so they have

an understanding of how to save their own. All members should have the basic RIT training that would allow for them to be prepared should they find themselves in a life or death situation. RIT's need to have special training in the art of rescuing a fire fighter in need, conducting building size-ups, proper use of rescue tools and a strong knowledge of the department policies on rapid intervention (Laskey, 1997). Problems develop early and often at all incidents so it is even more imperative that the RIT arrive as early as possible. RIT's must become an integral part of all IC tactics and strategies when operating at emergency scenes with IDLH atmospheres (Cobb, 1998). Integration of RIT training into the department training program, strong RIT SOGS, an established RIT equipment list and a RIT checklist (appendix 2) will ensure that the RIT concept is ingrained into the department philosophy.

The information and knowledge gained through the literature review has shown that the use of RIC/RIT's and Mayday concepts should be adopted as a minimum standard by the STFD. This information obtained from the study has shown that the standard has been set across the nation along with the State of Ohio that morally and ethically the STFD must meet the national standards for RIT and Mayday. We owe this measure of safety to our personnel.

RECOMMENDATIONS

Based on the supporting information after the completion of the research, the STFD needs to implement a standard operating guideline on RIT and Mayday. The concept should follow NFPA 1500, section 6-5 "Rapid Intervention for Rescue of Department Members." Research clearly indicates a real and immediate need for a Rapid Intervention Team to be available at all emergency incidents.

This program will provide for the rescuing of fire fighters while working at an IDLH incident that find themselves in trouble, for whatever reason. We must have the department prepared for any type of safety problem that may arise during an incident.

An SOG has been developed (Appendix A) for future implementation by the STFD. It clearly outlines the responsibility of the RIT and mayday and how the concepts will work on the fire ground. The additional information gained by the author also recommends that a RIT checklist be developed to fully benefit the program. A checklist developed by Kolomay and Hoff, "Saving Our Own: The Rapid Intervention Team Checklist" published in Fire Engineering (Appendix B) should be considered for implementation.

It is also recommended that the following actions be taken for immediate adoption by the STFD under the RIT and Mayday Guideline:

- A third engine is included in dispatch on all regular alarm fires with at least two fire fighters on board to perform the duties of the RIC.
- Assigning a RIT as soon as the available resources are on scene to fulfill the minimum of four firefighters.
- Evaluation of the incident by the incident commander with the calling for additional resources if the incident is larger than what the resources on scene can handle. Calling for mutual aid or recall of off duty personnel.
- The adoption of an associated RIT and Mayday training program to follow the national standards for both Guidelines.

The most important finding has been that training in RIT and Mayday is paramount. The program outlined in the second bullet on the previous page will encompass search and

rescue techniques, familiarization and use of the tools assigned to the RIT, the integration of the RIT concept into the ICS and a thorough review of the SOG. Included in this training will be the implementation of the RIT checklist.

The creation of a RIT SOG will greatly improve the ability of the STFD to respond immediately to a sudden hazardous event and increase the chances of a positive outcome for lost or downed firefighters.

Fire departments should be required to report if RIT's were on scene during firefighter fatalities, so that a true measurement can be established for the further reduction of line-of-duty deaths of firefighters. The word "time" is critical in three areas for the success of this research project. The time for the adoption of a RIT and Mayday standard is now. The time for the third engine is now, so that the most important "time" of all can be accomplished, the time for the rapid deployment of a RIT for a fallen firefighter in need, **IMMEDIATELY**. The most important outcome of this research project can best be described by Crawford (1998) when he wrote, "Time is life. We are all well aware of the importance of time when it involves the rescuing of one of our own on the fire ground. Any shortcut we can take to quicken the removal firefighter and maintain a margin of safety for the rescuers will ultimately increase the firefighter's chances for survival."

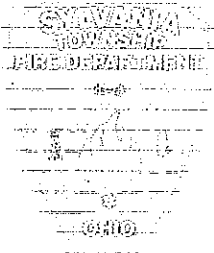
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APPENDIX 1 –STANDARD OPPERATING GUIDELINE

	Sylvania Township Fire Department Standard Operating Guideline		
	Section: FIRE FIGHTER SAFETY		SOG #
	Subject: RIC/ RIT / MAYDAY- HELP CALL		Page:
	Approved: <p style="text-align: center;"><u>Christopher Maurer, Fire Chief</u></p>		
	Date Issued:	Revised:	Review:

**FIREFIGHTER SAFETY
RIC / RIT / MAY-DAY HELP CALL**

Page 1 of 9

1. RAPID INTERVENTION CREW
 - A. On all incidents, the following shall be used as a guideline.
 - B. The purpose of the Rapid Intervention Crew (RIC) is to provide rapid rescue for the firefighting crews operating in an IDLH atmosphere at an emergency scene.
 - C. DEFINITIONS:
 1. **Immediate Danger to Life and Health (IDLH) Atmosphere.** OSHA defines an IDLH atmosphere for interior structural fires to be “an advanced fire that has spread inside of a building where high temperatures, heat and dense smoke” are present.
 2. **Working Structure Fire.** Terminology used to identify any structural fire that meets the definition of an IDLH atmosphere.
 3. **Initial Stages of an Incident.** The opening period of an incident during which tasks are being undertaken by the first arriving Companies with only one team assigned to or operating in the IDLH atmosphere.
 4. **Early Stages of an Incident.** The period of an incident immediately following its initial stages. This period is characterized by the operation of more than one team within the IDLH atmosphere.
 5. **Rapid Intervention Team (RIT).** The designated rescue team at the scene of a working structural fire. This team is established to provide immediately available personnel for any possible need for rescue of Fire Department personnel operating at emergency incidents.
 6. **Personnel Accountability Report (PAR).** A communication requested by IC on a periodic basis to determine that all personnel assigned to and working on scenes are accounted for.

- D. **RESPONSIBILITY:**
1. All supervisors are responsible for the training of their personnel and for ensuring proper compliance with this guideline.
 2. All members have the responsibility to adequately learn and carry out this guideline.
 3. All members shall show reasonable judgment in their use of this guideline.
- E. A RIC shall be assembled at all “working fires” and other incidents where fire department personnel are subject to hazards that would be immediately dangerous to life and/or health in the event of An equipment failure, sudden change of conditions or mishap.

Examples of special hazards include, but are not limited to:

- a. Offensive Interior Fire Operations. (assumed to be IDLH)
- b. Hazardous Materials Incidents (IDLH, potential IDLH, or unknown atmosphere)
- c. Trench Rescue
- d. Confined Space Rescue (assumed to be IDLH)

- F. Command will assign an appropriate engine, truck company or crew, plus an ALS unit, when RIC has been deployed, for RIC duties at the incident. A Rapid Intervention Crew will normally be no less than two (2) firefighters. It will be Incident Command’s discretion regarding the number firefighters in the RIC. The RIC will be a fresh group of firefighters that normally wouldn’t be circulated with firefighting companies. The ALS unit will be in addition to any other units that are needed for transportation of the injured civilians at the incident. A minimum of one company or crew and one ALS unit is required.

Command will:

- a. Establish the last known operating location of the lost crew.
- b. Request emergency radio traffic and broadcast that a firefighter is missing.
- c. Conduct a rapid size-up and order activation of the RIC, and advance them only if it is reasonably safe to do so and the possibility of rescue exists.
- d. Request all non-essential radio operations be discontinued except as related to RIC operations.
- e. Shift fire ground priorities to locating and removing the lost firefighter(s). **Firefighting operations that are controlling the fire shall not be compromised.**
- f. If conditions warrant, a hose line shall protect RIC at all times.

- g. If the RIC enters an area IDLH with no visibility, a guide rope will be attached to a stationary object outside the IDLH.
 - h. IC shall order a replacement RIC to cover the lost or trapped firefighters and the activated RIC.

- G. If a "MAYDAY" message is received or if radio contact is lost with a crew, the Incident Commander will immediately request a PAR of all crews operating on scene. If a crew cannot be contacted, they will be considered "lost".
 - Command will:
 - a. Establish the last known operating location of the lost crew.
 - b. Request emergency radio traffic and broadcast that a firefighter is missing.
 - c. Conduct a rapid size-up and order activation of the RIC, and advance them only if it is reasonably safe to do so and the possibility of rescue exists.
 - d. Request all non-essential radio operations be discontinued except as related to RIC operations.
 - e. Shift fire ground priorities to locating and removing the lost firefighter(s). **Firefighting operations that are controlling the fire shall not be compromised.**
 - f. If conditions warrant, a hose line shall protect RIC at all times.
 - g. If the RIC enters an area IDLH with no visibility, a guide rope will be attached to a stationary object outside the IDLH.
 - i. IC shall order a replacement RIC to cover the lost or trapped firefighters and the activated RIC.

- H. Command has the options of the following for RIC assignment:
 1. Assign the crew to RIC duties, designated as Rescue group.
 2. Cancel the company en-route after the fire has been declared under control AND a PAR has been obtained from **all** crews and the IDLH atmosphere no longer exists.
 3. Assigned other duties, such as relief for working crews, overhaul duties, etc...

- I. All RIC crew members will assume a ready state, including full PPE and SCBA. The RIC must be able to react immediately to sudden emergency events at the incident site. RIC crews should assess the need for s to provide for egress, rescue, and ventilation. When companies are operating on floors above ground, the RIC should consider pre-positioning ground ladders to allow for emergency egress and rescue.

J. For high-rise operations, RIC crews will be assigned to a position in the staging location, stairwell or other appropriate location.

K. RIC TOOLS (consisting of but not limited to)

Tools to be staged with the RIC will be: equipment staging tarp, flashlight for each team member, portable radios for each team member, 200' of search rope, forcible entry tools -halligan bar and a flat head axe, at least 1 forced entry hydraulic tool, life saving rope and harness, spare SCBA and mask for trapped fire fighter, stokes stretcher, power saw for both wood and steel, suitable ladders for the building involved, thermal imaging camera (if available).

II. RAPID INTERVENTION TEAM (RIT)

A. The purpose of the Rapid Intervention Team (RIT) is to provide rapid rescue for the firefighting crews operating in an IDLH atmosphere at an emergency scene.

B. A RIT shall be assembled at all "working fires" and other incidents where fire department personnel are subject to hazards that would be immediately dangerous to life and/or health in the event of An equipment failure, sudden change of conditions or mishap. A RIT will consist of not less than four firefighters. Command may assign more than one (1) company as RIT if necessary.

Examples of special hazards include, but are not limited to:

- a. Offensive Interior Fire Operations. (assumed to be IDLH)
- b. Hazardous Materials Incidents (IDLH, potential IDLH, or unknown atmosphere)
- c. Trench Rescue
- d. Confined Space Rescue (assumed to be IDLH)

C. DEFINITIONS:

1. **Immediate Danger to Life and Health (IDLH) Atmosphere.** OSHA defines an IDLH atmosphere for interior structural fires to be "an

advanced fire that has spread inside of a building where high temperatures, heat and dense smoke” are present.

2. **Working Structure Fire.** Terminology used to identify any structural fire that meets the definition of an IDLH atmosphere.
 3. **Initial Stages of an Incident.** The opening period of an incident during which tasks are being undertaken by the first arriving Companies with only one team assigned to or operating in the IDLH atmosphere.
 4. **Early Stages of an Incident.** The period of an incident immediately following its initial stages. This period is characterized by the operation of more than one team within the IDLH atmosphere.
 5. **Rapid Intervention Team (RIT).** The designated rescue team at the scene of a working structural fire. This team is established to provide immediately available personnel for any possible need for rescue of Fire Department personnel operating at emergency incidents.
 6. **Personnel Accountability Report (PAR).** A communication requested by IC on a periodic basis to determine that all personnel assigned to and working on scenes are accounted for.
- D. Command has the options of the following for RIT assignment:
- a. Assign the crew to RIT duties, designated as Rescue group.
 - b. Cancel the company en-route after the fire has been declared under control **AND** a Personnel Accountability Report (PAR) has been obtained from **all** crews and the IDLH atmosphere no longer exists.
 - c. Assigned other duties, such as relief for working crews, overhaul duties, etc.
 - d. If assigned to anything other than RIT duties, command must have another company assigned as the RIT.
 - e. All RIT crew members will assume a ready state, including full PPE and SCBA. The RIT must be able to react immediately to sudden emergency events at the incident site. RIT crews should assess the need for other access points to provide for egress, rescue and ventilation. When companies are operating on floors above ground, the RIT should consider pre-positioning ground ladders to allow for emergency egress and rescue.

- E. For high-rise operations, RIT crews will be assigned to a position in the staging location, stairwell or other appropriate location.
- F. If a "MAYDAY" message is received or if radio contact is lost with a crew, the IC will immediately request a PAR of all crews operating on scene. If a crew cannot be contacted, they will be considered 'lost'.

Command will:

- a. Establish the last known operating location of the lost crew.
- b. Request emergency radio traffic and broadcast that firefighter(s) are missing.
- c. Conduct a rapid size-up and order activation of the RIT, and advance them only if it reasonably safe to do so and the possibility of rescue exists.
- d. Request all non-essential radio operations be discontinued except as related to RIT operations.
- e. Shift fire ground priorities to locating and removing the lost firefighter(s). **Firefighting operations that are controlling the fire shall not be comprised**
- f. If conditions warrant, a hose line shall protect RIT at all times.
- g. If the RIT enters an area IDLH with no visibility, a guide rope will be attached to a stationary object outside the IDLH.
- h. IC shall order a replacement RIT to cover the lost or trapped firefighters and the activated RIT.

G. RIT TOOLS (consisting of but not limited to)

Tools to be staged with the RIT will be: equipment staging tarp, a flashlight for each team member, portable radios for each team member, 200' of search rope, forcible entry tools - halligan bar and flat head axe, at least 1 forced entry hydraulic tool, life saving rope and harness, spare SCBA and mask for trapped firefighter, stokes stretcher, power saw for wood and steel, suitable ladders for the building involved, thermal imaging camera (if available).

III. "MAY-DAY" COMMUNICATIONS

- A. This guideline shall be initiated when personnel are in danger and in need of emergency assistance. All personnel operating at a scene of an emergency have the responsibility to pay attention and to inform their officers of any situation where an emergency exists or where a "MAY-DAY" has been broadcast.
- B. For this guideline, a "MAY-DAY" will be used by firefighters to report their status as being lost, in trouble and/or needing rescue. Any member may use "MAY-DAY" to report a lost firefighter. Any report of a "MAY-DAY" will receive priority radio traffic followed by an emergency traffic tone from dispatch. The term "MAY-DAY" will be reserved **ONLY** to report missing or trapped firefighters. It should not be confused with a request for more manpower, equipment, etc.
- C. Upon hearing a "MAY-DAY" broadcast, all others on the radio frequency shall maintain radio silence, unless an emergency exists. Radio silence shall be maintained until IC advises differently.
- D. When a firefighter is in need of emergency assistance, or finds a firefighter who is in need of emergency assistance and is unable to communicate it, they shall do one or more of the following:
 - i. Activate their PASS alarm
 - ii. Broadcast a "MAY-DAY" message over their radio
 - iii. Announce what type of emergency exists and location (if known) or use a last recognizable reference point
- E. Command will maintain an awareness of the location of crews operating on the fire ground through assignments and the accountability system. In the event a "MAY-DAY" has been transmitted or a firefighter cannot be located through a PAR, command shall implement a rescue plan for the firefighter(s).
- F. Company officers and individual firefighters who suspect a firefighter is missing must notify the IC immediately. IC **MUST ALWAYS** assume that the missing firefighter is lost until the member is accounted for.

- G. All on scene personnel shall remain at their location until otherwise directed. It is a must that rescue efforts be planned, coordinated, and directed toward rescue efforts and not to causing more problems by having all personnel rush to the emergency site and cause chaotic, unplanned and ineffective operations. If a missing firefighter is to survive, the IC must keep the fire out of the rescue area. With a RIT, the IC can initiate an immediate rescue effort without withdrawing or relocating firefighting crews.
- H. All firefighting operations in an IDLH atmosphere will have a RIT on scene. This team shall be activated, and gives the IC a fresh crew, fully outfitted and available for commitment to a search and rescue of the last known area of the missing or trapped firefighter(s).
- I. If appropriate, in some situations such as a collapse or explosion, crews can become separated. The only practical method to obtain an accurate PAR may be to withdraw them to the exterior. Withdrawal is a judgment call based on circumstances at the time, information available and resources. The absolute need for an accurate PAR and information on potential missing firefighters remains a critical priority.

IV. OTHER ASSISTANCE REQUESTS

- A. Any time a firefighting crew feels their personal safety is in jeopardy, they shall request police for a "firefighter in trouble". The police will dispatch crews on an emergency, and the next closest Sylvania Twp. Engine will respond.
- A. For situations that require police assistance, but pose no immediate threat, notify dispatch of this when requesting police. These requests should include nature of the incident, reason for the call. Fire personnel should withdraw from any potentially violent situation and wait for police backup. If police have been requested and their assistance is no longer needed, notify dispatch so they may cancel the responding crew.

APPENDIX 2**Rapid Intervention Team Checklist****SIZE-UP**

- 1. Building size up (length x width x height)
- 2. Building occupancy
- 3. Building construction type:
 - Wood frame
 - Heavy timber
 - ordinary
 - Noncombustible
 - Fire resistive
- 4. Placement of windows, doors, fire escapes, porches, etc.
- 5. potential danger of high-security doors, barred windows, building modifications

TACTICS

- 6. Offensive, defensive, defensive-to-offensive
- 7. Command operations:
 - Check tactics board
 - Check accountability system
 - Communications/incident commanders
- 8. Ladders and truck operations
- 9. Fire ground time vs. progress

EQUIPMENT

___ 10. Place equipment in staging area

OTHER OPERATIONS

___ 11. Check with safety/compare information

___ 12. Potential collapse and collapse area

___ 13. Relocate or add more RIT

___ 14. Location of EMS unit

Source: Kolomay, R. & Hoff, B. (1998, January). Saving Our Own: The Rapid Intervention Team Checklist. *Fire Engineering*, 12.

APPENDIX 3**Copy of e-mail sent to Fire Departments**

My name is Lt. Michael J. Ramm and I am working on a research project for the OFE program through the Ohio Fire Chiefs Association. My research is on RIT and Mayday policies and procedures. Currently my department does not have a policy in place. I am trying to write, develop, and implement such a policy. I am asking that you send me a copy of your current policy so I may use it as a guide in developing our policy. I am trying to follow the national standards for this policy and I would appreciate some guidance from your department's policy.

I am also requesting answers to the following questions:

1. Do you follow the national standards for manpower for you RIT, or do you operate a RIC?
2. How often does your RIT train on Save Your Own procedures?
3. When does your department call a Mayday?

Please e-mail these back to me or you can mail them to my home address: 6868 Ramblehurst, Sylvania, Ohio, 43560. Thanks in advance for your replies.