Identifying Training Strategies to Improve the Delivery of the Incident Command System

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A research project submitted to the Ohio Fire Executive Program

May 2019

CERTIFICATION STATEMENT

I hereby certify that the following statements are true:

1. This paper constitutes my own project, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, ideas, expressions or writings of others.

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ABSTRACT

Effective and efficient incident command (IC) is a vital component of any successful fire department. The problem is that MTFEMS does not have a formal training curriculum to prepare its incident commanders for the demands they may face when placed in situations that call for the establishment, implementation and utilization of the ICS. The purpose of this research was to identify appropriate training strategies to improve the departments command level officer's ability to make sound decisions and consistently establish, implement and utilize the departments incident command system.

Research questions for the project included:

1. What are the causes of inconsistencies in performance of command level officers in the role as incident commanders?
2. How do the current command level officers view the departments current incident command system operating procedure?
3. Are their practical training approaches to improve decision making on the fire ground by command level officers?
4. What approaches do the surrounding departments use to continually develop their command level officers?

Descriptive and action research was conducted to obtain data for this research project. A comprehensive literature review was conducted along with an extensive review of past EFO and OFE applied research projects. Additionally, research efforts included conducting interviews of internal command level officers, local command level officers and a survey was distributed to fire departments throughout the state of Ohio seeking input from their command level officers.

Research revealed that there were a variety of training methods used to prepare command level officers and that hands-on training was most effective. Improving situational awareness, decision-making capabilities and building experiences should be the key outcomes of the training.

Recommendations included: adoption of Blue Card, consider an industry standard decision-making model, amending the departments post incident critique process to develop case studies from their outcomes and development of a comprehensive officer development program that focuses on improving situational awareness, decisions-making and building experiences. Suggestions for further research included continuing educations units for command level officers.

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INTRODUCTION

Effective and efficient incident command (IC) is a vital component of any successful fire department. Lives are at risk if incident command is not established, implemented and subsequently utilized to manage incidents safely. Understanding who, what, when, how and why of IC is something that should be emphasized and practiced routinely. Adopting and utilizing an incident command system (ICS) that serves the needs of the department is paramount in safely managing emergency incidents. The National Fire Protection Association (NFPA) now requires an ICS be established on all emergency incidents (National Fire Protection Association, 2013). To support this notion, the Homeland Security Presidential Directive #5 requires that all public safety agencies use and adopt an ICS (Department of Homeland Security, 2008).

Over the last twenty years the fire service has evolved and now encompasses a wider range of disciplines, which in turn has increased the responsibility of incident commanders. Whether it be a building fire, an automobile extrication or a hazardous materials incident, incident commanders are being tasked with rapidly analyzing and sizing-up the circumstances, processing a large amount of information, formulating a plan and then making decisions based on all those variables. This process can be daunting and overwhelming. Catastrophic results may ensue if the incident commander fails to thoroughly recognize and make sound decisions based on the information seen and provided. There are several contributors that may influence the success or failure of incident commanders on emergency scenes: internal and/or external factors, level of experience, level of training and a department operating procedure to name a few.

PROBLEM

Miami Township Fire & EMS (MTFEMS) is currently in a position of turnover in its command level staff. The institutional knowledge and experience that is set to retire within the next three to five years is going to leave the department with a potential void in its ability to safely and consistently manage incident scenes. Currently, new company officers are being tasked with establishing and implementing the departments ICS with little to no formal training. This circumstance is potentially setting the department up for a catastrophic event. The department recently adopted its own ICS operating procedure (OP). The goal of the OP is to set a framework for success and attempt to provide guidance and consistency when the ICS is implemented. The problem is that MTFEMS does not have a formal training curriculum to prepare its incident commanders for the demands they may face when placed in situations that call for the establishment, implementation and utilization of the ICS.

PURPOSE

The purpose of this research is to identify appropriate training strategies that lend to the improvement of the departments incident commander's ability to make sound decisions and consistently establish, implement and utilize the departments ICS. Using descriptive statistics, I will seek to answer the following questions:

1. What are the causes of inconsistencies in performance of command level officers in the role as incident commanders?
2. How do the current command level officers view the departments current incident command system operating procedure?
3. Are their practical training approaches to improve decision making on the fire ground by command level officers?

4. What approaches do surrounding departments use to continually develop their command level officers?

BACKGROUND AND SIGNIFICANCE

Miami Township Fire and EMS serves a thriving community located about twenty-five miles northeast of downtown Cincinnati, Ohio. The township is 33 square miles with a current population of about 41,000. There is myriad of potential hazards located within Miami Township. These hazards include commercial and residential structures, five elementary schools, a high school, several mercantile businesses, parks, railways, interstate and divided highways, several miles of river and streams, over 150 ponds and several churches. Miami Township has become a hot bed for elderly care facilities. Within the last four years, five of these facilities have opened. This has resulted in a dramatic increase in call volume. Each of these hazards has its own uniqueness, which in turn can create challenges for incident commanders.

The department is comprised of 47 fulltime employees and 40 part-time employees. Services include fire suppression, emergency medicals services at the paramedic level, hazardous materials mitigation, technical rescue response, water rescue operations, fire prevention and inspections, public education. Each shift day, which is structured as A, B and C shift and follows a 24/48 work schedule, is made up of thirteen-line personnel, a minimum of one lieutenant and a captain who functions as the shift commander. Shift personnel staff four fire stations and operate three engines, one aerial platform, four ambulances and an incident command vehicle daily. The department's management staff is composed of a fire chief, an assistant chief, a deputy chief, a training captain and an administrative captain. They typically

work a forty-hour work week and respond to emergency incidents dependent on the nature of the call.

The background behind the problem starts with the department's lack of proactivity surrounding the evolution of the fire services ICS. Over the past twenty years the fire service has evolved into a multidiscipline entity. This has been driven by the demands of society. With these demands and the changes in hazard types, the requirements of several NFPA guidelines, Homeland Security directives and the reporting groups of NIOSH and Fire Fighter Near Miss the onus of the incident commander has skyrocketed. A tremendous amount of burden is now being cast upon incident commanders, specifically the departments shift captains as a result. The departments shift captains must be prepared and prepare themselves to handle a wider array of emergency incidents keeping the safety of the resident of the community and fire service personnel at the forefront.

For the last twenty years, MTFEMS did not operate under an operating procedures manual. Concepts and philosophies were shift dependent and typically didn't cross shift lines. Each shift did its own thing, specifically when it came to the ICS. With the hiring of the new fire chief, that quickly changed. An ICS operating procedure (OP) was quickly adopted and implemented. The OP set the expectations of incident commanders and requires certain benchmarks and incident command positions to be established. For instance, each structure fire call requires the establishment of an accountability officer, a safety officer and a geographic officer. These positions are typically filled by the incident management assistant team (IMAT) which is comprised of surrounding chief level officers who are simultaneously notified when the department is dispatched for a structure fire or potentially complex incident. Issues came to light at the outset of the OP. Specifically, members of the IMAT team responding to incident scenes

were not used to fill the required positions designated by the OP or the IMAT members didn't report to the IC and filled roles they saw fit at the time of arrival. Both circumstances increased the chaotic nature of incident scenes. The IC had to move their focus away from the strategy and tactics occurring on the incident scene and account for the actions of IMAT, thus increasing the already high stress levels surrounding the incident.

With the adoption of the new ICS OP, the department is now utilizing a first, second and third tier alarm system. On a first alarm assignment for a residential structure fire each of the following apparatus are dispatched: four engine companies, one aerial device, an ambulance, the shift commander and the IMAT. This response framework was put in place to accommodate the response time and manpower guidelines of NFPA 1710. From the outset, the departments shift commanders are behind the curve when it comes to span of control because of these guidelines. To manage effectively, one's span of control should not exceed seven. The National Institute of Management Systems (NIMS) has stated that five is the optimum number (Department of Homeland Security, 2008). Emery (2007), supports this notion by stating: "Maintaining span of control is the key that will open the door to competent incident management."

Another contributing factor impacting the MTFEMS officer's ability to efficiently and effectively use the ICS is experience and knowledge. Job experience and knowledge plays a large role in one's ability to analyze, understand and make decision when called upon. Soon, there is going to be a large turnover in MTFEMS seasoned command staff. This turnover will result in a huge loss of job experience and institutional knowledge pertaining to functioning as incident commanders. Currently, lieutenants ride up when shift captains are off and function as shift commanders. These occurrences are too infrequent to properly provide the experience needed to prepare them for the demands of the position. This infrequency will eventually lead to

issues when the time comes for the newly promoted captains to serve as incident commanders. To go along with this lack preparation, the departments run volume pertaining to actual calls that require the use of the ICS is low. As an example, in 2016 there were twelve documented structure fire calls across the three shifts. That averages to four per shift. This is not enough exposure to prepare the current shift captains, let alone the aspiring lieutenants.

Through the departments post incident analysis (PIA) process, review of training activities, conversations amongst peers and direct observation, the issues mentioned above have come to the forefront surrounding the department's officers' ability to make sound decisions and establish, implement and utilize its adopted ICS. The department has recently begun to take small steps at ensuring that ICS is established, implemented and utilized correctly. These issues are currently being addressed through open dialogue and review of the departments IC OP at monthly officer meetings. The open dialogue amongst the officer staff has created some inciteful conversations, but will it alone translate into appropriate application and address the issues? Are there other modes that are better suited and more applicable? Identifying the most appropriate mode to prepare MTFEMS officer staff for the demands of high acuity, low frequency calls will ultimately benefit the entire department operationally because they will be more effective and efficient.

LITERATURE REVIEW

Literature review associated with the problem and research questions was primarily done using the on-line archives of the Learning Resource Center at the National Fire Academy (NFA). Several of the applied research projects from the Learning Resource Center provided the basis and foundation for the content within. Review of the pertinent standards from the National Fire Protection Association (NFPA) and National Incident Management System (NIMS) were

conducted as well. Lastly, trade publication articles, books, and internet searches on leadership, incident command, decision making, performance and incident command training were also used to provide support and background.

Emergency scene operations occur in a very dynamic and highly stressful environment. The nature of these environments can quickly become overwhelming for even the most seasoned incident commanders. Varone (2001) stated that today's fire ground commanders have a considerably more complex role to play which in turn is intellectually challenging more than ever before. Adopting a solid ICS and implementing a specific incident command officer training program can assist in combating the complex challenges faced by current and up and coming incident commanders.

Currently, there are a variety of legally required and recommended industry standards governing incident commanders and incident command systems. NFPA is one such resource that has several applicable standards relative to the training and performance of incident command officers and systems. NFPA 1021, *Standard for Fire Officer Professional Qualifications*, identifies the minimum job performance requirements for a fire officer and the four levels of officer progression (NFPA 1021, 2014, pg. 1). The standard focuses on preparing the fire officer for the challenges on the fire ground, within the firehouse and the community. NFPA 1561, *Standard on Emergency Services Incident Management System*, requires that all emergency services entities conduct emergency operations within an effective incident management system (NFPA 1561, 2008, p. 1). It also stipulates that emergency services organizations "shall provide refresher training at least annually (NFPA 1561, 2008, p. 8)."

The Department of Homeland Security developed the National Incident Management System (NIMS) to "provide a systematic approach to guide departments and agencies at all

levels of government, nongovernment organizations and the private sector to work seamlessly to prevent, protect against, respond to, recover from, and mitigate the effects of incidents regardless of cause, size, location or complexity, in order to reduce the loss of life and property and harm to the environment (Department of Homeland Security, 2008 pg. 1)." NIMS provides a commonality that enables communities to work together by providing standardization through consistent terminology and organizational structure. Terms such as incident commander, unified command, accountability, incident action plan (IAP) and span of control all apply and are utilized at the local level.

Decision making on incident scenes is of utmost importance in mitigating emergencies effectively and efficiently. While being a part of the chaotic nature of emergency scenes, incident commanders must be of sound mind and possess the ability to analyze, process, and make split second decisions. Ultimately, these decisions are paramount to the success or failure of command and control of the incident. The International Association of Fire Chiefs (2013) has referred to the decision-making process as an art form. There are numerous decision-making models that have been developed, used and relied upon to successfully make decisions when needed. Several of these decision-making models have been used in the emergency services setting, but typically they are more applicable in the private sector because noted limitations. The one model, based on the literature, with the least amount of limitations is the Recognition Primed Decision Making (RPDM) model.

There are four primary tenets to the RPDM and they hinge on the decision makers ability to rely on past experiences (Klein, 2008). The four tenets begin with sizing up the situation, understanding the information gathered from the size-up, performing a mental simulation, forecasting the outcome and then implementing a course of action (International Association of

Fire Chiefs, 2013). Through intuition and analytics, the decision maker identifies the current circumstances, matches it to past experiences and then formulates a mental model in order to project what will happen. Intuition is "our subconscious mind as it analyzes our previous experiences and tells us how those experiences relate to what's happening right now (Salka, 2004, pg. 105)." The research of Johnson and Raab (2003) shows support for the RPDM when they concluded that when confronted with unfamiliar problems the decisions made surrounding the circumstances were often correct if the nature of the problem was familiar to the decision maker.

The major caveat or limitation of the RPDM is the reliance on experience. Without experience, decision makers may struggle with the four steps of the RPDM (Lipchitz, 2001). The brain is the repository for memory recollection. Gassaway (2010) states that "upon sizing-up the situation, the brain will search for matching experiences and select the proper solution." If decision makers do not have the expertise and experiences to fall back on, then what is the answer? Sturgeon (2009) concludes that individuals in stressful environments make intuitive decisions based on recognition of previous experiences and apply one that works for a given situation.

It is well documented that the fire ground is a chaotic, unpredictable and constantly changing environment (Gwyer, 2013). Stress is a natural response when individuals are placed in these types of situations. Stress can be a result of either internal and external factors or a combination of both. Internally or physiologically, the brain releases a multitude of hormones in response to stressful situations. Epinephrine, norepinephrine and cortisol are the primary hormones released by the brain in response to stressful situations. Each of these hormones plays an important role when humans are placed in survival mode. Unfortunately, they have a

negative impact on cognitive function (Menkes, 2011). An incident commander's decision-making is impacted by the level of stress they are under and their ability to manage that stress.

To go along with the physiological response to stress, there are many external distractions that can add to or impact the stress levels of incident commanders. For example, excessive noise on incident scenes has shown to reduce mental efficiency and affect short term memory (Gwyer, 2013). Bystanders or residents affected by the emergency can be distractions as well. What they say or do can impact the IC's decision-making process (Gassway, 2008). Inclement weather is another variable the IC must account for if it directly impacts those involved in the incident. Accommodations may need to be made to get bystanders out of the environment or those directly involved in the incident made need special accommodations too. Both circumstances can add to the complexity of the situation and increase stress levels.

The combined effect of these distractions has a huge bearing on an IC's ability to make sound decisions. Based on the data from the National Fire Fighter Near Miss Reporting System, decision-making and situational awareness are two of the most common contributing factors of near miss events (International Association of Fire Chiefs [IAFC], 2016, p. 7). Studies have shown that people will fall into three categories when placed in stressful situations: twenty percent will remain calm and composed, twenty percent will become overwhelmed with stress and make poor decisions and the remainder will follow with uncertainty (Dunne, 2013). The obvious goal for IC's is to fall into the calm and composed category so they can have a grasp on the situation and subsequently make sound decisions. This will be reliant on the IC's ability to manage the internal and external distractions and the associated stress created by emergency scenes.

It was stated above that when confronted with stressful or unfamiliar situations individuals rely on past experiences to make sound decisions (Klein, 2008). This is particularly true for those in the emergency services profession, but what if there are no past experiences to rely on? How do you create the experiences so that sound decisions can be made in times of chaos and stress? Based on the research, incident command training has proven to be an applicable approach (Sturgeon, 2009). Using things such as debriefings, timers, checklists, pneumonics, and storytelling have all been proven successful in objectively preparing IC's for the decisions they may be confronted with. Each of these tools requires comprehensive training to be effectively utilized (Sturgeon, 2009). As a result of the Near Miss Reporting System a web-based training has been developed to aide incident commanders improve their decision-making skills utilizing the RPDM in the high-stress, chaotic environment of emergency scenes (IAFC, 2016, pg. 16).

There are benefits and limitations to any training tool or method. The Orange County Fire & Rescue Department (OCFRD) has developed an incident command training curriculum that is getting positive results. Each of their officer's is required to attend the department's thirty-two-hour incident command training school. Sturgeon (2009) reports that improvements in incident communications and coordination, integration of NIMS, the officer's ability to read smoke and fire conditions and SOP benchmarks have been noted. The key to any training should lie in its ability to create a true to life environment. In the book *Crew Resource Management*, Lubnau II and Okray (2002) suggest that when people are placed under stress they revert to over learned behaviors. These over learned behaviors are a direct result of continued practice even upon successful completion. Therefore, repetition is one key to a successful training methodology.

The metaphor being used in the fire service today pertaining to the decision-making process of incident commanders is the slide in the slide tray concept (Caussin, 2012). The experiences of IC's become slides that are stored in the brain (slide tray) and when IC's are confronted with making a critical decision the brain finds a slide (experiences) like the situation at hand and uses it as guide in the decision-making process. IC's rely on those slides or experiences to assist in making sound decisions. Without true to life experiences on emergency scenes, the only way to increase the slides in our slide tray is through applicable training that is close to real life as possible.

The problem of inconsistent performance and command competency must be addressed accordingly before the upcoming loss of institutional knowledge within the organization. Addressing it now will favorably affect the future of the department. A Strong command and control, along with a "strong command presence prevents a bad situation from getting worse" Tippett (2009). According to the data from the National Institute of Occupational Safety and Health (NIOSH) the top five causes of firefighter deaths are:

- Inadequate or improper risk assessment (scene size-up)
- Lack of incident command
- Lack of accountability
- Inadequate communications
- Lack of SOGs or failure to follow established SOGs

It is important that competent and consistent incident command is in place in our community to effectively mitigate emergency incidents safely (Caussin, 2012).

PROCEDURES

Descriptive and action statistics will be used to obtain data for this research project. Extensive research was done utilizing the online Learning Resource Center of the National Fire academy, the archives of past research papers completed by Ohio Fire Executive graduates and the search engine google scholar. Searches on google scholar were done by entering the following key words: fire service, incident command systems, incident command training, performance and decision making. This approach provided a comprehensive grasp of what others are doing with regards to establishing, implementing, and utilizing ICS, as well as appropriate training modalities to prepare current and future incident commanders of MTFEMS.

The procedures utilized for this research were designed to answer the four research questions: a) What are the causes of inconsistencies in performance of command level officers in the role as incident commanders? b) How do the current command level officers view the departments current incident command system operating procedure? c) Are their practical training approaches to improve decision making on the fire ground by command level officers? d) What approaches do surrounding departments use to continually develop their command level officers? Every attempt was made to use the most current research relative to the topics within.

To answer research question a) the following procedures will be used: a literature review of the Center for Disease Control (CDC) - National Institute for Occupational Safety and Health (NIOSH) line of duty deaths and United States Fire Administration (USFA) causes of on-duty firefighter fatalities was used to look at any inconsistencies noted in these reports by incident commanders. An internal review of the department's post incident analysis (PIA) reports for documented structure fire responses will be used to identify any trends in consistencies with establishing, implementing and utilizing the departments ICS OP. The job descriptions for both

lieutenants and captains who fill the role as incident commanders. Lastly, interviews will be conducted with the three Chiefs of the department with the goal of defining criteria for and expectations of the department's incident commanders. The interview questions can be found in Appendix A.

To answer research question b) the following procedure will be used: interview of the Captains and Lieutenants of the department who fill the role as an IC for the department and their associated job descriptions (Appendix B & C). The interview questions (Appendix D) will serve several functions: to get an understanding of each officer's comfort level regarding the departments newly adopted ICS OP (Appendix E), their comfort level managing incidents as incident commanders, their level of training relative to the incident commander position and what additional trainings they feel they need to best serve in role as incident commanders.

To answer research question c) the following procedure will be used: an online search of industry standard courses (Appendix F) offered by the National Fire Academy (NFA) and the Ohio Fire Academy (OFA) with the primary focus on the incident commander position. A literature review from the online Learning Resource Center of the National Fire academy was also conducted to identify training modalities utilized by other department throughout the United States.

To answer research question d) the following procedures will be used: interview of five to eight area Chiefs with the intent of identifying their departments requirements of incident commanders, whether they have a training program for their incident commanders and what training modalities do they utilize to train their incident commanders. The questions for the interview can be found in Appendix G. A survey, utilizing Survey Monkey, will also be

distributed throughout the state to similar size and structure department to MTFEMS (Appendix H).

Limitations of the Study

The internal and external interviews conducted on command level officers, and the survey distributed all had limitations. The questions associated with the internal interviews, as well as the external interviews, allowed for subjectivity surrounding the research topic. Conclusions were made, but were the conclusions biased and based on opinion? Additionally, both interview pools were not exhausted. Only seven of the nine Station Lieutenants were successfully interviewed and of the five surrounding departments, only three of them were interviewed. Regarding the external survey, the assumption must be made that the respondents answered the questions truthfully. The survey received an ample sample size of one-hundred and seventy-five respondents, but there were no qualifiers to type and size of the respondent's department. Therefore, it is unclear how each respondent's department compared to MTFEMS and thus the results of the data may not be applicable.

RESULTS

The results for this study were compiled through various means. Qualitative interviews were conducted on the three chief officers of the department, the station lieutenants and the shift captains who fill the role as the overall incident commander on incident scenes. Members of surrounding departments who fill the role as the overall IC were interviewed as well to get an understanding of how they approach the ICS and the role of the IC. The responses to the interview questions assisted in an answering research questions one, two and portions of four. The literature review provided answers to research question three and a survey, which received 175 responses, was utilized to answer research question four.

Research question one, which sought to determine inconsistencies in performance of command level officers in the role as the overall IC, was addressed by interviewing the departments chief officers. The inconsistencies were identified by the chiefs as a result of the following: the departments post incident analysis (PIA) process, tail boards, direct observation on incident scenes and idle conversations during monthly officer meetings. The contributing factors or reasons for the inconsistencies identified by the chiefs could be attributed to, but not limited to the following: application of a newly developed operating procedures (OP), overtime shift work, philosophical differences between shifts and experience. The three chiefs agreed that experience was probably the greatest contributor to the noted inconsistencies. The final question of the interview looked to identify what they feel needs to be done to prevent these inconsistencies from occurring in the future. In summary, the three chiefs identified the following needs: continue using the PIA process, an OP manual in the IC vehicle, an applicable officer development training program and adoption of the Blue Card methodology.

Research question two moved the focus to those department members who commonly fill the role as the overall IC. Interviews were conducted on the shift captains and the station lieutenants to determine their perception and understanding of the departments newly adopted ICS OP. Interview question one established average years of experience between the two groups. The shift captains have a combined average of twenty-five years of experience as compared to seven for the station lieutenants. Question two identified the relative number of times each group member functioned in the role of the overall IC. On average, each shift captain filled the role of the overall IC greater than 150 times as compared to 25 – 50 times for each station lieutenant. Question three sought to determine whether each member felt they had the knowledge, skills and abilities to establish, implement and utilize the departments newly adopted

ICS OP. Seventy-five percent of the officers interviewed felt confident in their knowledge, skills and abilities to apply the departments ICS OP. Lastly, each officer was asked what they felt would best assist them in maintaining or improving their knowledge, skills and abilities to apply the departments ICS OP. The consensus answer was applicable training with a focus on situational awareness and the incident command system.

Research question three revolved around identifying practical training approaches to improve decision making on the fire ground by command level officers. The literature review identified several courses and training methods. The National Fire Academy and the Ohio Fire Academy offer several courses that can prepare officers for the ICS and the decision-making process when in the role of the overall IC (Appendix F). Based on the research conducted by Klein (1999), experienced incident commanders make decision intuitively. Command level officers rely on past experiences to formulate a plan and then mitigate the situation (Johnson & Raab, 2003). Training methods identified in the literature review that improved the decision-making process were simulations, case studies, storytelling, videos, tabletops and debriefings. Klein (1998) reported that simulations, case studies, videos and storytelling adequately developed personnel by allowing them to experience situations encountered by others and then apply those experiences to their current situation. Debriefings and the post incident critique were other proven methods identified in the literature review that improve decision-making capabilities and build experiences (Sturgeon, 2009).

Research question four investigated what surrounding departments use to maintain and develop the knowledge, skills and abilities of their command level officers. Interviews were conducted on members of surrounding jurisdictions who fill the role of the overall IC. The results of the interviews conducted demonstrated that most of the surrounding departments have

adopted the Blue Card methodology as their ICS model, they rely on fire alarm dispatches, live burns and simulations to hone their knowledge, skills and abilities of their command level officers. Interesting, none of them have a formalized officer development program.

To obtain a greater understanding of what other departments do to train their command level officers, a twelve-question survey (www.surveymonkey.com) was emailed to departments throughout the state of Ohio (Appendix H). One-hundred and seventy-five individuals responded to the survey. Figure 1 (Appendix I) illustrates the breakdown of rank among the respondents. The figure shows the group was diverse, but the majority or 43.4% of the respondent's make-up the other category; who were 97.6% percent the rank of Fire Chief.

Interestingly, of the one-hundred and seventy-five respondents, 42.3 % have less than five years of experience at their current rank as shown in Figure 2 (Appendix I), but only 2.9% have zero experience as the overall IC (Figure 3, Appendix I). These results demonstrate that the vast majority of the respondents or 97.1% have at least some experience as the overall IC. Figure 4 (Appendix I) shows that a quarter of the respondents have less than fifteen occurrences as the overall IC.

When asked how one makes decisions on the fire ground as the overall IC, 94.3% of the respondents use both analytics and intuition to make decisions as Figure 5 (Appendix I) demonstrates and when assigning strategic and tactical priorities the respondents utilize a combination of factors. Theses factors are illustrated in Figure 6 (Appendix I). The majority or 91.4% of the respondents utilize a combination of operating procedures, experiences and human senses to assign strategic and tactical priorities.

Figure 7 (Appendix I) demonstrates that it is almost a fifty-fifty split on whether the respondent's department has a formalized training program to prepare their officers for the role

of the overall IC. The majority or 86.3% feel confident they do have the knowledge, skills and abilities to function as the overall IC even if they do or do not have a formalized training program (Figure 8, Appendix I). In addition, Figure 9 (Appendix I) illustrates that the combination of education and experience ranks highest at 58.4% as the most significant factors influencing a command officers' proficiency and consistency as the overall IC, with experience and practice ranking second at 38.7%. Based on the respondents, it can be concluded that education, practice and experience are the three key factors influencing a command officers' proficiency and consistency as the overall IC.

Incident commanders need to possess a variety of skills to successfully mitigate incidents. Figure 10 (Appendix I) demonstrates that good communication skills, effective problem recognition and the ability to make sound decisions rank the highest among the skills listed. Figures 11 and 12 (Appendix I) demonstrate the types and methods of training that the respondents feel best prepares incident commanders for their role. Figure 11 illustrates that training with a focus on fire ground risk assessment and strategies, fire behavior and ICS are the best types of training. Figure 12 identifies hands-on training, fire ground simulations and job shadowing as the most applicable methods to present the types of trainings identified in Figure 11.

DISCUSSION

The findings of this research led to several observations: including how IC make decisions on the fire ground, identified pertinent decision-making models and appropriate training types and methods that will translate into preparing IC for the demands of emergency scenes. Each of these conclusions will prove beneficial to the department moving forward.

It has been well documented that the fire ground is a chaotic and unpredictable environment (Gwyer, 2013). Incident commanders (IC) need to have the wherewithal to effectively manage these environments with the highest degree of safety. Unfortunately, we as human beings can only process up to seven pieces of information simultaneously (Putnam, 1995, p.2.). This limitation may lead to catastrophic events on the fire ground. Therefore, adopting a proven incident command system operating procedure and an incident commander's ability to process information, make decisions and then implement a plan is paramount in safely mitigating emergency scenes.

The decision-making process on the fireground does not follow classic models because of its nature. An IC must process a multitude of information simultaneously in a short period of time and then set a course of action to mitigate the emergency scene. Typically, an IC will weigh the perceived problem against previous experiences to assist in making decisions and then set a course of action (Klein, 1999). This decision-making process is known as Recognition-Primed Decision Making (RPDM). Thus, the decision-making process is reliant on past experiences to find a solution that works best. Interestingly, all three department chiefs and the respondents to the survey agreed that experience, along with education and practice are major components of an incident commander's ability to effectively mitigate an emergency scene. However, the RPDM does have limitations. What if there are no past experiences to rely on to make decisions? Based on the results, the shift captains experience level far outweighs that of the station lieutenants. In addition, there is a high probability that most of the shift captains will retire within the next three to five years. This turn over will result in a tremendous loss in experience and institutional knowledge surrounding the position of the IC.

Another observation identified from the research is the importance of having an effective ICS decision-making model and/or operating procedure. Adopting a decision-making model and/or an operating procedure can provide guidance and structure that leads to consistent establishment, implementation and utilization of an ICS. The National Fire Protection Association (NFPA) now requires an ICS be established on all emergency incidents (National Fire Protection Association, 2013). To support this notion, the Homeland Security Presidential Directive #5 requires that all public safety agencies use and adopt an ICS (Department of Homeland Security, 2008).

The department took the necessary steps several years ago and developed an ICS OP. The results show that seventy-five percent of the departments current officers, who fill the role as the overall IC, feel confident in their knowledge, skills and abilities to apply the departments ICS OP. The goal moving forward should be that all current officers become 100% confident in their knowledge, skills and abilities to apply the departments ICS OP. Each of the current officers acknowledged that applicable training would best assist them in either maintaining or improving their effectiveness in applying the departments ICS OP. Survey results identified that focusing on trainings such as fire ground risk assessment, fire ground strategies, fire behavior and the ICS would best serve them as incident commanders.

When determining what other departments are using as their ICS model, the results showed that Blue Card was the resounding response. Surrounding jurisdictions believe that Blue Card provides uniformity and consistency in managing emergency scenes. With a large reliance on automatic and/or mutual aid to manage emergency scenes, surrounding jurisdiction believe that Blue Card provides the safest means to manage incidents when there is an unfamiliarity of how others operate. Blue Card does have its limitations. A lack in the number of responses

where Blue Card can be utilized is a limitation identified by one surrounding jurisdiction. Their answer to the problem was using simulation videos to practice the application of the Blue Card model.

Throughout the research, level of experience was identified as a vital component to safely manage emergency scenes. The department is set to lose its most experienced officers and that is going to produce a large void in experience relative to the IC position. The most identifiable means to improve experience without actual emergencies is applicable training. The learning process through applicable training needs to be frequent, focus on methodology and provide an avenue for developing experiences (Salka, 2009). Simply put, training should attempt to increase the number of slides in our slide tray so we can call upon them when necessary (Caussin, 2012). The results of this research demonstrate that applicable trainings such as scenario-based simulations, videos, and hands-on can all lead to the development of experiences and improve one's ability to make sounds decisions. Klein (1998) supports the use of simulations, hands-on and video trainings as appropriate training methods to increase one's level of experience and situational awareness. Respondents to the survey agreed with Klein that hands-on and simulation trainings are applicable to promote experience, with hands-on being the most applicable.

The research of Lubnau II & Okray (2004) concluded that aids such as case studies, debriefs/tailboards and post incident critiques improve the decision-making process. These aids are supported and endorsed by the three chiefs of the department. The department has utilized each of these in the past to identify positive outcomes and learning opportunities observed on emergency scenes. The respondents to survey, as well as the three chiefs, felt that job shadowing was another method that should be considered. Job shadowing allows one to witness things first

hand through the eyes of another to gain knowledge and build experiences from their experiences.

Each method is unique and can be done in an environment that doesn't have catastrophic results if poor decisions are made. That is a positive, but also a negative. Performing these trainings in a controlled environment doesn't mimic the ever-changing environment experienced on an emergency scene. Blanchard & Thacker (2003, p.207) promote the concept of over learning. The over learning process relies on repeated exposure to training methods that pushes past the point of simply completing the training. Repeated exposure to a variety of training methods through the over learning process can improve situational awareness and communication skills, which were identified by the respondents of the survey as essential skills an IC should possess to be effective.

In summary, the results of this research project identified that experience and an adopted ICS are key to one's ability to make sound and effective decisions on emergency scenes. With that being identified, the department needs to develop a job shadowing/mentoring and training program that focuses on building experiences, improves situational awareness and develops communication skills in its command level officers. The training developed should include, but not be limited to simulation videos, hands-on and scenario-based trainings. The department needs to adopt Blue Card and train all its officers to promote continuity in establishing, implementing and utilizing its ICS OP. Each of these training methods, as well as Blue Card must be continually evaluated for relevance and effectiveness. Without a comprehensive evaluation process, catastrophic results could ensue in the form of injuries or loss of life for department members or those we serve in the community. Ultimately, the departments course of action to address the findings of this research should be to promote safe and effective practices

that will improve the departments current and future officers' capabilities to make sound and safe decision on emergency scenes.

RECOMMENDATIONS

1. Miami Township Fire and EMS should fully adopt Blue Card. Currently, the departments ICS OP has portions of Blue Card integrated within it. Blue Card has been adopted by our surrounding jurisdictions. NFPA 1710 Standard for the Organizational and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Career Fire Departments has set standard guidelines on turn out times, number of personnel on an apparatus and number of apparatus on scene within a certain time frame. These standards have caused many departments to rely on their neighboring jurisdictions to meet the standards. Departments are working more with their neighbors to mitigate emergency scenes. Fully adopting Blue Card will promote consistency, proficiency and streamline operations between all involved. Upon adoption of Blue Card, continual training needs to occur among neighboring jurisdictions so safe operations can persist.
2. Based on the research conducted, incident commanders generally use the Recognition-Primed-Decision-Making (RPDM) model during emergency scene operations to make decisions about the situation presented to them. Incident commanders rely on past experiences and set a course of action by imagining it. The RPDM has a four-step process: define the problem, generate a course of action, evaluate the course of action and carry out the course of action. Miami Township Fire & EMS should adopt a specific fire service decision-making model that mimics the tenets of the RPDM. The research identified two such decision-making models: National Fire Academy's STICO course and the four-step approach developed by Brunacini & Brunacini. Adopting either of these models will assist

incident commanders when decisions need to be made during chaotic, unpredictable and critical situations. In addition, the department should require the use of checklists to ensure all benchmarks are considered and subsequently met during emergency incidents.

3. Miami Township Fire & EMS should continue its use of post incident critiques. Each event is an opportunity for everyone within the department to learn from. Post incident critiques identify best practices and areas that need improvement. The information garnered from post incident critiques needs to be shared and disseminated in the form of case studies throughout the department. Department members can learn from each other's experiences and hopefully add slides to their slide tray. Therefore, Miami Township Fire & EMS should develop a process that turns the findings of each post incident critique into a case study, which then can be utilized as a learning opportunity for all department members.
4. Miami Township Fire & EMS dedicates a significant amount of time to training their new recruits and incumbents. Each recruit goes through a comprehensive mentoring process. Upon completion, each is subjectively and objectively evaluated to determine if they are qualified to come off orientation status. The department has a comprehensive training program that incumbents are required to participate in, but there is a significant gap in the training of its officers. Specifically, when it comes to leadership and the incident command position. To address the current and future challenges regarding training the departments officers, the following recommendations will be presented.
    A. The department needs to develop a job shadowing program for its future officers that prepares them for the challenges that occur on emergency scenes as well as within the confines of the fire house. The current Shift Captains must use their expertise, institutional knowledge and experiences to facilitate the growth and maturation of the

Station Lieutenants. Each Station Lieutenant should be subjectively and objectively evaluated by their Shift Captain in conjunction with the training division on a biannual basis to highlight their strengths and areas that need improvement regrading the disciplines set forth in the officer development training curriculum.

B. The departments training division needs to develop a dedicated officer development training curriculum.

   i. The curriculum should be set by the training division and focus on the following areas: interpersonal dynamics, communication skills, human resource management, leadership, emergency scene operations at the tactical and strategic level, decision-making and the incident command system. The curriculum should not solely rely on internal resources but broaden its approach and utilize external resources too. The literature review identified several applicable courses offered by the Ohio Fire Academy and the National Fire Academy, which are listed in Appendix F. The goal of the program should be to challenge each officer and expose them to as many training methods as possible so they can safely and effectively operate inside and outside the fire house.

   ii. The curriculum should take into account, but not be limited to the following industry standards: NFPA 1021, *Standard for Fire Officer Professional Qualifications*, NFPA 1026, *Standard for Incident Management Personnel Professional Qualifications*, NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*, NFPA 1561, *Standard on Emergency Services Incident Management*, Federal Emergency Management NIMS requirements and all pertinent Department of Homeland Security initiatives that apply to the fire service.

iii. The curriculum should also consist of a combination of the following training methods: simulations, videos, hands-on and scenario-based trainings. Each of these training methods has a uniqueness and has been proven to hone one's ability to make sound decisions and build experiences. The development, implementation and execution of trainings utilizing these methods should make every effort to be as true to real life situations so the experiences they garner become slides in the slide tray and can be called upon when needed.

C. Lastly, the training division should develop a set number of continuing education units (CEU) from the disciplines stated above that each officer must satisfy every three years. The research conducted did not reveal much information regarding CEU programs for officer development, but it should be similar in nature to the recertification process for firefighters and paramedics.

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APPENDIX A – MTFEMS CHIEF OFFICER INTERVIEW QUESTIONS

1. What is your current rank with the department?
2. How long have you served at this rank?
3. What knowledge, skills and abilities are required for MTFEMS incident commanders?
4. Are there any incident commander inconsistencies or failures that have repeated from these perspectives?
    a. Fire to fire
    b. Shift to shift
    c. Person to person
5. What can or needs to be done to meet the departments incident command operating procedures expectations on a consistent basis?

APPENDIX B – MTFEMS STATION LIEUTENANT JOB DESCRIPTION

POSITION SUMMARY

The Station Lieutenant is the first-line command officer responsible for the administration and supervision of a company. The officer; (a) coordinates and directs a company for fire suppression, hazardous material response, rescue operations, emergency medical services and other emergency incidents within the Incident Command System; (b) coordinates daily station operations and non- emergency tasks with the shift captain and other station lieutenants; (c) may be required to act as the shift supervisor and be required to assume the duties of the officer-in-charge of the shift; (d) assists senior level officers by providing administrative and operational support for various departmental programs.

REPORTING RELATIONSHIPS

- Reports to the Shift Captain

SUPERVISION EXERCISED

- Supervises both full-time, part-time, and all volunteer personnel

MINIMUM QUALIFICATIONS AND CERTIFICATION REQUIREMENTS

- Three (3) years of career firefighting and paramedic experience with Miami Township **Fire and EMS (MTF&EMS) or another public political jurisdiction.**
- Comprehension of technical data, written instructions and verbal orders.
- Computer literacy in Microsoft Office programs and other software programs.
- High school diploma or equivalent
- Valid state issued driver’s license
- Certified State of Ohio Firefighter II
- Certified State of Ohio EMT-Paramedic

- Certified State of Ohio Fire Inspector

PREFERRED

- Fire Officer I
- Decision Making for Initial Company Operations, Preparation for Initial Company Operations, Strategy and Tactics for Initial Company Operations, or equivalent
- Leadership I, II and III for Fire and EMS, or equivalent
- Basic Fire Investigations (National Fire Protection Agency 921)
- Incident Safety Officer (National Fire Protection Agency 1521)
- Blue Card Incident Command
- Associate Degree in accordance with Article 24–Training and Education, of the current Collective Bargaining Agreement (CBA)

ESSENTIAL FUNCTIONS

The Station Lieutenant will be required to:

General

- Establish and maintain effective working relationships with various external agencies, other Township departments, MTF&EMS staff and members of the public.
- Function as the District 26 supervisor when assigned and in accordance with the requirements set forth in the Shift Captain Job Description.
- Assist with managing staffing levels, schedules, and employee substitutions in accordance with the Scheduling Manual.
- Supervise line personnel and direct them in accordance with Miami Township Personnel Policies and Procedures, MTF&EMS EMS Protocol and Operating Procedures, and the current CBA.

- Act as a liaison between the Fire Department and other agencies, groups, and/or organizations.

Field Work

- Actively participate in all departmental training evolutions, physical fitness program and fitness assessment program, and facilitates participation of their assigned line personnel.
- Provide care and act in accordance to the Miami Township Personnel Policies and Procedures and the MTF&EMS EMS Protocol and Operating Procedures.
- Evaluate emergencies and calls for service, establish the Incident Command System when appropriate and apply incident action plans as required. May occasionally function as the Incident Commander.
- Coordinate and conduct fire safety inspections and pre-incident planning.
- Participate in public relations (PR) events to educate the public on best practices for injury and fire prevention.

Perform other duties as assigned.

Station Work

- Complete documentation and data entry into the department's RMS software programs related to all assigned functions including awards and recognition; training; inspections; evaluation and review; attendance; and corrective action.
- Perform basic office work functions, such as copying, scanning, typing, filing, writing memos and sorting.
- Research, review and recommend equipment and programs that will improve the effectiveness and efficiency of the delivery of services. Prepare purchase orders and/or budget requests as necessary.

- Ensure care and maintenance of department issued Personal Protective Equipment and uniforms.
- Facilitate shift briefing with other officers and line personnel regarding shift activities.
- Coordinate, conduct and/or participate in shift briefing with other officers and line personnel regarding shift activities.
- Conduct employee performance evaluations and recommend discipline and commendations when warranted.
- Perform daily housekeeping, routine inspections, maintenance and/or inventory of buildings, grounds, vehicles, supplies and equipment.
- Participate in Continuous Quality Improvement (CQI) processes and programs to maintain a high level of patient care.
- Assist with the development of short and long-term planning strategies.
- Perform other administrative duties as assigned.

WORK EXPECTATIONS

Work Ethic

- Maintain a high regard for personal safety, as well as that of the crew and the public.
- Demonstrate self-motivation and enthusiasm.
- Demonstrate pride in organization and self.
- Display honesty, trustworthiness and accountability.
- Maintain physical ability to perform essential functions of the position.
- Maintain high ethical and moral standards. Report any attempted bribes and/or gratuities.
- Work well with other Miami Township departments and various external county and state agencies.

- Deliver a high level of customer service to internal and external customers.
- Demonstrate fair and non-judgmental treatment when coaching and disciplining personnel.
- Effectively manage confidential, difficult, and sensitive issues using tact and diplomacy, taking into account the organizational culture, climate, and/or politics.
- Maintain a high level of accuracy and confidentiality concerning financial and personnel matters.

Time Management

- Arrive at work punctually and prepared for duty.
- Adapt to a variable schedule, as often necessary in responding to emergencies or details with very short, or no notice.
- Demonstrate self-control and an ability to manage time, multiple projects and priorities with minimal supervision.
- Demonstrate an ability to manage multiple assignments of personnel, allowing them time to complete their assignments.
- Complete reports and assignments in a timely manner.

Teamwork and Customer Relations

- Interact with the public in a positive and professional manner.
- Create ideas that improve production, organizational performance or result in cost or time-savings for the department. Use critical thinking to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
- Develop strategies to cope with stressful situations involving various personality types and expectations.

- Develop and maintain cooperative and professional relationships with internal employees and external county and state agencies and organizations.
- Be actively involved in decisions affecting work detail.

Professional Development

- Actively participate in ongoing continuing education that is offered by the department and outside training that is requested or required.
- Maintain certifications.
- Pursue continuing education that focuses on personnel management, customer service, team building, leadership, incident command and any other educational opportunity that can improve one's knowledge, skills and abilities.
- Research and recommend educational offerings for the various levels of the organization that will assist with the professional and personal development of its members.
- Consider working toward a credential designation as a Fire Officer by the Center for Public Safety Excellence and/or the Ohio Fire Chief's Association.

WORKING CONDITIONS AND PHYSICAL DEMANDS

The work environment characteristics described below are representative of those an employee may encounter while performing the essential functions of this job.

- While performing the duties of this position, the employee is frequently required to: stand, walk, balance, sit, kneel, crouch, stoop, climb, bend, or crawl; use hands to finger, handle, feel or operate objects, tools or controls; reach with hands and arms; climb stairs and ladders; and be able to traverse unstable surfaces. The position requires mobility in residential, commercial, and industrial facilities as well as outdoor environments.

- Duties involve moving materials weighing up to 100 pounds on a regular basis, such as boxes, office equipment, specialized medical equipment, etc., and occasionally weighing over 100 pounds.
- Manual dexterity and coordination are required approximately 75% of the work period while operating equipment such as a computer keyboard, telephone, motorized vehicle, instruments and tools used in the delivery of emergency medical care.
- At times, the employee will be required to operate in conditions where noise levels are elevated, and hearing protection may be required. The noise level in the work environment is typical of most office environments.
- In the course of duties, the employee may encounter hazardous materials, blood-borne pathogens, and/or other hazardous environments.
- Part of the work period may be spent in other environments which may expose the employee to inclement weather, hazardous materials and other extreme and/or dangerous environments where personal protective equipment may be required.
- Specific vision abilities required by this job include close vision, distance vision, peripheral vision, depth perception and the ability to adjust focus with or without corrective measures.

TOOLS AND EQUIPMENT

This position requires the ability to utilize and operate the following types of specialized equipment. This list should not be considered “all-inclusive”, as other specialized types of equipment may be required, but will include all equipment carried on MTF&EMS apparatus.

- Firefighting, specialty, medical transport vehicles and staff cars

- Firefighting and rescue tools and equipment to provide service, mitigate emergencies and protect the public
- Department issued Personal Protective Equipment and accessories
- Portable and/or Mobile Radio
- Computers: Mobile Data Computer, Patient Care Reporting Laptop, desktops and tablets
- Patient Transport devices – Cot, Stair Chair, Binder lift, MegaMover Tarp
- Basic and advanced life support equipment
- Other department issued equipment related to this position

DISCLAIMER AND EMPLOYEE ACKNOWLEDGMENT

The information provided in this job description is intended to indicate the general nature and level of work performed by an incumbent within this position. It is not to be interpreted as a comprehensive inventory of all functions, responsibilities, duties, qualifications, working conditions and physical demands required of employees assigned to this position. Management has the sole discretion to add, modify and/or designate functions, responsibilities, duties, qualifications, working conditions and physical demands of the position at any time. This job description does not constitute an employment agreement between the employer and the incumbent. By signing below, I acknowledge that I have read and understand this Job Description and the provisions of this Disclaimer.

_____ _____ _____

Signature Printed Name Date

DATES AND APPROVALS

Authorized by:

Signature Printed Name Date

APPENDIX C – MTFEMS SHIFT CAPTAIN JOB DESCRIPTION

POSITION SUMMARY

The Shift Captain is the officer responsible for the administration and supervision of a shift. The officer; (a) coordinates and directs fire and EMS units for fire suppression, hazardous material response, rescue operations, emergency medical services and other emergency incidents within the Incident Command System as a command level officer; (b) oversees daily station operations and non-emergency tasks in conjunction with station lieutenants and other senior level officers; (c) provides administrative and operational support for various departmental programs; and (d) performs various other duties as required.

REPORTING RELATIONSHIPS

- Reports to the Deputy Chief

SUPERVISION EXERCISED

- Supervises Lieutenants, both full-time, part-time, and all volunteer personnel

MINIMUM QUALIFICATIONS AND CERTIFICATION REQUIREMENTS

- Seven (7) years of career firefighting and paramedic experience with Miami Township Fire and EMS (MTF&EMS) or another public political jurisdiction, with at least two (2) years of experience in the rank of Lieutenant or Captain, or a combination thereof.
- Associate Degree in accordance with Article 24–Training and Education, of the current Collective Bargaining Agreement (CBA).
- Superior oral and written communication skills. Comprehension of technical data, written instructions and verbal orders.
- Computer literacy in Microsoft Office programs and other software programs.
- Valid state issued driver’s license

- Certified State of Ohio Firefighter II
- Certified State of Ohio EMT-Paramedic
- Certified State of Ohio Fire Inspector
- All “Preferred” requirements as listed in the Station Lieutenant Job Description.

PREFERRED

- Fire Officer II
- Ohio Fire Executive or Managing Fire Officer (National Fire Academy)
- Maxwell’s 21 Irrefutable Laws of Leadership
- Incident Command System 300 and 400
- Bachelor’s Degree in accordance with Article 24–Training and Education, of the current CBA

ESSENTIAL FUNCTIONS

The Shift Captain will be required to:

General

- Establish and maintain effective working relationships with various external agencies, other Township departments, MTF&EMS staff and members of the public.
- Function as the District 26 Supervisor.
- Manage daily staffing levels, schedules, and employee substitutions in accordance with the Scheduling Manual.
- Supervise Station Lieutenants and line personnel and direct them in accordance with Miami Township Personnel Policies and Procedures, MTF&EMS EMS Protocol and Operating Procedures, and the current CBA.

- Act as a liaison between the Fire Department and other agencies, groups, and/or organizations.

Field Work

- Coordinate and oversee departmental shift training in conjunction with the Captain of Training and Safety.
- Participates in departmental physical fitness program and fitness assessment program and facilitates participation of their assigned line personnel.
- Provide care and act in accordance to the Miami Township Personnel Policies and Procedures and the MTF&EMS EMS Protocol and Operating Procedures.
- Generally, function as the Incident Commander. Evaluate emergencies and calls for service, establish the Incident Command System when appropriate and apply incident action plans as required.
- Coordinate and conduct fire safety inspections and pre-incident planning.
- Coordinate and participate in public relations (PR) events to educate the public on best practices for injury and fire prevention.

Perform other duties as assigned.

Station Work

- Complete documentation and data entry into the department's RMS software programs related to all assigned functions including awards and recognition; training; inspections; evaluation and review; attendance; and corrective action.
- Perform basic office work functions, such as copying, scanning, typing, filing, writing memos and sorting.

- Research, review and recommend equipment and programs that will improve the effectiveness and efficiency of the delivery of services. Prepare purchase orders and/or budget requests as necessary.
- Ensure care and maintenance of department issued Personal Protective Equipment and uniforms.
- Facilitate shift briefing with other officers and line personnel regarding shift activities.
- Conduct employee performance evaluations and recommend discipline and commendations when warranted.
- Ensure completion of daily housekeeping, routine inspections, maintenance and/or inventory of buildings, grounds, vehicles, supplies and equipment.
- Support and uphold Continuous Quality Improvement (CQI) processes and programs to maintain a high level of patient care.
- Assist with the development of short and long-term planning strategies.
- Perform other administrative duties as assigned.

WORK EXPECTATIONS

Work Ethic

- Maintain a high regard for personal safety, as well as that of the crew and the public.
- Demonstrate self-motivation and enthusiasm.
- Demonstrate pride in organization and self.
- Display honesty, trustworthiness and accountability.
- Maintain physical ability to perform essential functions of the position.
- Maintain high ethical and moral standards. Report any attempted bribes and/or gratuities.

- Work well with other Miami Township departments and various external county and state agencies.
- Deliver a high level of customer service to internal and external customers.
- Demonstrate fair and non-judgmental treatment when coaching and disciplining personnel.
- Effectively manage confidential, difficult, and sensitive issues using tact and diplomacy, taking into account the organizational culture, climate, and/or politics.
- Maintain a high level of accuracy and confidentiality concerning financial and personnel matters.

Time Management

- Arrive at work punctually and prepared for duty.
- Adapt to a variable schedule, as often necessary in responding to emergencies or details with very short, or no notice.
- Demonstrate self-control and an ability to manage time, multiple projects and priorities with minimal supervision.
- Demonstrate an ability to manage multiple assignments of personnel, allowing them time to complete their assignments.
- Complete reports and assignments in a timely manner.

Teamwork and Customer Relations

- Interact with the public in a positive and professional manner.
- Create ideas that improve production, organizational performance or result in cost or time-savings for the department. Use critical thinking to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

- Develop strategies to cope with stressful situations involving various personality types and expectations.
- Develop and maintain cooperative and professional relationships with internal employees and external county and state agencies and organizations.
- Be actively involved in decisions affecting work detail.

Professional Development

- Actively participate in ongoing continuing education that is offered by the department and outside training that is requested or required.
- Maintain certifications.
- Pursue continuing education that focuses on personnel management, customer service, team building, leadership, incident command and any other educational opportunity that can improve one's knowledge, skills and abilities.
- Research and recommend educational offerings for the various levels of the organization that will assist with the professional and personal development of its members.
- Consider working toward a credential designation as a Fire Officer by the Center for Public Safety Excellence and/or the Ohio Fire Chief's Association.

WORKING CONDITIONS AND PHYSICAL DEMANDS

The work environment characteristics described below are representative of those an employee may encounter while performing the essential functions of this job.

- While performing the duties of this position, the employee is frequently required to: stand, walk, balance, sit, kneel, crouch, stoop, climb, bend, or crawl; use hands to finger, handle, feel or operate objects, tools or controls; reach with hands and arms; climb stairs

and ladders; and be able to traverse unstable surfaces. The position requires mobility in residential, commercial, and industrial facilities as well as outdoor environments.

- Duties involve moving materials weighing up to 100 pounds on a regular basis, such as boxes, office equipment, specialized medical equipment, etc., and occasionally weighing over 100 pounds.
- Manual dexterity and coordination are required approximately 75% of the work period while operating equipment such as a computer keyboard, telephone, motorized vehicle, instruments and tools used in the delivery of emergency medical care.
- At times, the employee will be required to operate in conditions where noise levels are elevated, and hearing protection may be required. The noise level in the work environment is typical of most office environments.
- In the course of duties, the employee may encounter hazardous materials, blood-borne pathogens, and/or other hazardous environments.
- Part of the work period may be spent in other environments which may expose the employee to inclement weather, hazardous materials and other extreme and/or dangerous environments where personal protective equipment may be required.
- Specific vision abilities required by this job include close vision, distance vision, peripheral vision, depth perception and the ability to adjust focus with or without corrective measures.

TOOLS AND EQUIPMENT

This position requires the ability to utilize and operate the following types of specialized equipment. This list should not be considered “all-inclusive”, as other specialized types of equipment may be required, but will include all equipment carried on MTF&EMS apparatus.

- Firefighting, specialty, medical transport vehicles and staff cars
- Firefighting and rescue tools and equipment to provide service, mitigate emergencies and protect the public
- Department issued Personal Protective Equipment and accessories
- Portable and/or Mobile Radio
- Computers: Mobile Data Computer, Patient Care Reporting Laptop, desktops and tablets
- Patient Transport devices – Cot, Stair Chair, Binder lift, MegaMover Tarp
- Basic and advanced life support equipment
- Other department issued equipment related to this position

DISCLAIMER AND EMPLOYEE ACKNOWLEDGMENT

The information provided in this job description is intended to indicate the general nature and level of work performed by an incumbent within this position. It is not to be interpreted as a comprehensive inventory of all functions, responsibilities, duties, qualifications, working conditions and physical demands required of employees assigned to this position. Management has the sole discretion to add, modify and/or designate functions, responsibilities, duties, qualifications, working conditions and physical demands of the position at any time. This job description does not constitute an employment agreement between the employer and the incumbent. By signing below, I acknowledge that I have read and understand this Job Description and the provisions of this Disclaimer.

_____	_____	_____
Signature	Printed Name	Date

DATES AND APPROVALS

Authorized by:

_____	_____	_____
Signature	Printed Name	Date

APPENDIX D – MTFEMS SHIFT CAPTAIN & STATION LIEUTENANT INTERVIEW QUESTIONS

1. What is your current rank with the department?
2. How long have you served at this rank?
3. Do you fill the role as incident commander on incident scenes?
4. What training have you had to prepare you for filling the role as the overall incident commander of an incident scene?
5. Approximately how many times have you been the overall incident commander on incident scenes such as building fires?
6. What additional training do you feel you need to improve your knowledge, skills and abilities as the overall incident commander on incident scenes?

APPENDIX E – MTFEMS INCIDENT COMMAND OPERATING PROCEDURE

PURPOSE

Establish an Operating Procedure (OP) to specify a model procedure for commanding operations.

Fix responsibility for command on a specific individual through a standard identification system depending on the arrival sequence of members, companies and chief officers.

SCOPE

These Procedures are designed to provide a framework for Incident Command (IC) operations when dealing with incidents of any type, hazard or complexity within Miami Township.

These Procedures apply to all personnel of the department.

Any officer arriving on a scene after the initial Incident Command System (ICS) has been established shall proceed to the command post for assignment.

DEFINITIONS

Hot Zone

The Hot Zone will be defined as any area that requires an SCBA, charged hoseline, special protective clothing, or in which firefighting personnel are at risk of becoming lost, trapped, or injured by the environment or structure.

PROCEDURES

A. Command Responsibilities

1. Provide for the safety, accountability and welfare of personnel operating on an incident for the entirety of the incident.
2. Ensure the conservation of life and property.
3. Stabilize the incident.

B. **Functions of Command**

1. Assume, announce and name command and establish an effective operating position.
2. Perform a rapid size-up including a 360-degree view of the involved structure.
3. Identify overall strategy, develop an Incident Action Plan (IAP), and assign companies/personnel consistent with departmental Procedures.
4. Develop an effective Incident Management Organization.
5. Provide strategic, tactical and task-oriented objectives.
6. Review, evaluate and revise strategy and the incident action plan as needed.
7. Provide for the continuity, transfer and termination of command.

C. **Establishing Command**

1. Whenever possible, the District 26 supervisor should be the first to arrive on the scene and prepare for incident operations.
2. Any fire department member or company that arrives first at the scene shall establish command of the incident and give an initial on-scene report. The initial Incident Commander will remain in command until command is transferred or terminated.
    a. The Incident Commander may be an officer from a mutual-aid department.
3. Before the Incident Commander can identify the appropriate overall incident strategy and develop an IAP, they must perform a size-up to include:
    a. The size and condition of the building.
    b. The occupancy type.

c. The fire's size, intensity, extent and location.

d. The occupancy's life-safety hazard.

e. Access in and around the structure.

4. Provide an initial radio report to include:

a. Designation of the unit arriving on the scene.

b. Building description.

c. Problem description.

d. Announcement of strategy and mode.

e. Command name.

D. **Command Options**

1. Nothing Showing Mode (Investigation)

Situations where there is no obvious hazard noticed upon arrival or where the reported situation is not obvious without further investigation. No immediate hazard to life and/or property is evident.

a. A situation of "Nothing Showing" does not qualify as a proper and thorough investigation.

b. The first due MTF&EMS company officer shall confirm the nature of the incident with a proper and thorough investigation before any companies are staged in-place or canceled.

2. Fast Attack Mode

Situations that require immediate, decisive action for stabilization and that require the direct involvement or supervision of the initial Incident Commander.

Fast Attack mode should not last more than a few minutes and will end when either of the following criteria is met: (1) the situation is stabilization, or (2) command is transferred to another officer not engaged in the Fast Attack Mode.

3. Command Mode

Situations that, because of their size, complexity, or potential for rapid escalation, require immediate establishment of fixed command.

E. **Transfer of Command**

1. In some situations, it may be advantageous for the first arriving Incident Commander to transfer command to the next company or officer on the scene.
    a. If the Incident Commander is from a mutual-aid department, transfer of command to a first-arriving Miami Township Fire and EMS (MTF&EMS) command level officer should only occur if doing so will improve operation or if the initial Incident Commander chooses to transfer command.
    b. If the initial Incident Commander is the company officer of the first due engine company, command will be assumed/transferred to the District 26 supervisor or next arriving command officer not actively involved in firefighting operations.
    c. A higher-ranking officer arriving on the scene at the same time as the initial company should usually assume command.
    d. Command will not be transferred to an officer who is not yet on the scene.
2. Transfer of command should be accomplished face-to-face whenever possible with exchange of the following information

a. Incident conditions.

b. Incident action plan and progress toward completion of tactical objectives.

c. Safety considerations.

d. Current company and personnel assignments.

e. Appraisal of need for additional resources.

F. **Command Organization**

There are three separate organizational levels for all incident operations.

1. Task Level

   The task level refers to those activities normally accomplished by individual companies or specific personnel.

2. Tactical Level

   The tactical level directs operational activities toward specific objectives. Within this level are the Division and Group designations.

3. Strategic Level

   The strategic level constitutes the activities necessary for overall operational control, establishing objectives, managing the incident strategy, setting priorities, allocating resources and forecasting ahead of the event.

G. **Command Structure**

1. The Incident Commander shall develop an organizational structure appropriate to the scope of the incident and all companies and personnel will operate under and for the established command structure.

2. The department will use the “Division” and “Group” designations. A division is identified by a geographic location (level 1, roof, alpha) and a group is identified by a function (attack, search, ventilation).

3. High-visibility vests shall be worn by the Incident Commander, Accountability Officer, Safety Officer and any other position assigned within the ICS structure.

H. **Standard Geographic Designations**

1. As a general practice, command will be established in a visible location in front of the building on the address side, typically the Alpha Side.

2. The exact location of command is up to the discretion of the initial Incident Commander but should remain stationary as best possible.

   a. The Command Post shall include the Incident Commander, Incident Command Aid, Operations Section (if assigned) and Accountability Officer.

3. Floors or levels are designated by floor number. The roof is designated as “Roof” and the basement as “Basement”.

I. **Staging**

Staging will be used to control responding resources, prevent premature deployment of resources, improve operational safety, and prevent commitment of unneeded resources. Unless indicated otherwise by command, all responding units beyond the second due companies will go into Staging upon approach.

1. <u>Level One Staging</u>

   Level One Staging shall be at a water source near the scene in a direction related to the incident.

Units are to advise command, on the assigned fireground channel, of their arrival at Level One Staging and remain ready for immediate assignment.

2. Level Two Staging

   a. Level Two Staging will be established when it is necessary to assemble sufficient resources to meet potential needs of an escalating or long-term incident.

   b. Level Two Staging is established by the Incident Commander at a location remote from the incident.

   c. Initially, the company officer of the initial arriving apparatus at the Level Two Staging Area will become the Staging Area Manager. If there is no company officer, then a member from the first arriving company will become the Staging Area Manager until replaced by an officer on a later arriving company.

3. Staging In-place

   a. Staging in-place will be established when it is not necessary for resources to commit to either Level One or Two Staging.

   b. Staging in-place will be at the discretion of the Incident Commander and will require units to stage at an advantageous location.

   c. A situation of "Nothing Showing" does not qualify as a reason to "stage in- place" incoming companies.

J. **Sections and Command Staff**

When a smaller incident escalates into a larger incident, additional organizational support should be established by the Incident Commander. Section and Command Staff positions should be established as needed to maintain span of control within optimum limits.

1. Sections (Operations, Planning, Logistics, and Finance/Administration) may be implemented at any time, based on the needs of the Incident Commander. When not established, Section responsibilities are carried out by the Incident Commander unless assigned otherwise.

    a. Operations Section – responsible for direct management of all tactical activities, tactical priorities, and operational safety in coordination with the Incident Commander.

        • This position shall be filled by a MTF&EMS officer and located within the ICP whenever possible.

    b. Planning Section – responsible for gathering, assimilating, analyzing, and processing information needed for effective decision-making. Planning is also responsible for projecting potential resource needs.

    c. Logistics Section – responsible for providing services and support systems, including facilities, transportation, supplies, equipment maintenance, refueling, feeding, communication, CISM, Rehab, or any other item deemed necessary or as requested by command.

    d. Finance/Administration Section – responsible for procurement of service/supplies, documenting financial costs, analysis of legal concerns,

documenting payroll records, workers' compensation claims, and for obtaining any and all needed incident documentation for potential cost recovery efforts.

2. Command Staff is established by the Incident Commander to address key activities that are not a part of the line organization. If not otherwise assigned, the Incident Commander is responsible for these activities.

    a. Information Officer – develops accurate and complete information regarding the incident as a whole, such as cause, size, current situation, resources committed, etc. This person is usually the point of contact for media and other agencies needing information regarding the incident.

    b. Liaison Officer – the point of contact for representatives from other agencies. Representatives of assisting agencies coordinate through the Liaison Officer and should have authority to speak on all matters on behalf of their agency.

3. Certain Command Staff positions are required for all incidents where an immediate danger to life exists such as a structure fire. These positions shall be filled as other MTF&EMS officers arrive on the scene and/or by the use of IMAT personnel.

    a. Accountability Officer – tracks the location of fire crews while operating in and around the hot zone on the emergency scene.

        - The Accountability Officer shall be positioned in the Command Post.
        - Shall assist the Incident Commander with monitoring radio traffic.

b. Safety Officer – responsible for the assessment of hazardous and unsafe conditions and the development of measures to assure overall incident safety.

c. Geographic Officer – assigned to monitor a specific division of an incident as deemed necessary by the Incident Commander.

- This position shall be assigned as a division, such as the "Side Charlie Division," "Division 2", etc.

K. **Incident Management Assistance Team (IMAT)**

1. MTF&EMS is a member of the Southwest Ohio Incident Management Assistance Team. When requested, the team provides qualified senior level officers capable of filling management roles within the command structure.
2. Activation of the team is will be automatically requested by certain type of incidents or by request of the Incident Commander through the Clermont County Communications Center.
3. An IMAT will automatically be dispatched to assist MTF&EMS on first alarm or greater alarms.
4. Team members function for the Incident Commander of the jurisdiction having authority.
5. It is preferable that the Operations Section be assigned to a MTF&EMS officer whenever possible.

L. **Township Integrated Emergency Management Plan**

Major incidents that affect a large area of the Township or result in complex operations are managed in accordance with the Miami Township Integrated Emergency

Management Plan. The Plan will be activated by the Incident Commander as deemed necessary and proper within Procedures of the *Township Integrated Emergency Management Plan.*

M. **Clermont County Emergency Operations Plan**

1. The Township may request activation of the Clermont County Emergency Operations Plan (EOP) and Emergency Operations Center (EOC) as deemed appropriate and necessary.
2. A request for activation of the County EOP must be made through the Clermont County EMA via the Communications Center and is usually made by a member of the Township EOC staff.
3. During major emergency situations, the Incident Commander may initiate such a request prior to the EOC staff assembling.

APPENDIX F – NATIONAL FIRE ACADEMY AND OHIO FIRE ACADEMY ICS COURSES

NFA Courses

1. Command and Control Decision Making at Multiple Alarm Incidents (R0297) Incident Management (6-Day On-Campus)
2. Command and Control of Fire Department Operations at Natural and Man-Made Disasters (R0308) Incident Management (10-Day On-Campus)
3. Command and Control of Fire Department Operations at Target Hazards (R0314) Incident Management (6-Day On-Campus)
4. Command and Control of Fire Department Operations at Target Hazards (R0825) Incident Management (6-Day On-Campus)
5. Command and Control of Incident Operations (R0831) Incident Management (6-Day On-Campus)
6. Command and Control of Incident Operations (R0312) Incident Management (6-Day On-Campus)
7. ICS-300: Intermediate ICS for Expanding Incidents (O0465) Incident Management (2-Day Off-Campus)
8. ICS-400: Advanced ICS Command and General Staff-Complex Incidents (O0467) Incident Management (2-Day Off-Campus)
9. Incident Command for Highrise Operations (O0321) Incident Management (2-Day Off-Campus)
10. Incident Command System and Resource Management for the Fire Service (O0376) Incident Management (2-Day Off-Campus)

11. Incident Command System for Structural Collapse Incidents (O0322) Incident Management (2-Day Off-Campus)

OFA Courses

1. Incident Command System and Resource - 2301
2. Incident Command System for Structural Collapse Incidents - 2245

APPENDIX G – INTERVIEW QUESTIONS FOR EXTERNAL COMMAND LEVEL OFFICERS

1. What is your current rank with the department?
2. How long have you served at this rank?
3. Approximately how many times have you been the overall incident commander on incident scenes such as a building fires?
4. What training have you had to prepare you for filling the role as the overall incident commander of an incident scene?
5. Does your department have an incident commander training program that develops the knowledge, skills and abilities to be an incident commander?
6. Does your department use Blue Card as the model for your incident command system?
7. If not, then what do you use?

APPENDIX H – EXTERNAL SURVEY QUESTIONS

1. What is your present rank?
    a. Lieutenant
    b. Captain
    c. Battalion Chief
    d. Assistant Chief
2. How long have you served at this rank?
    a. Less than 5 years
    b. 5 to 10 years
    c. Over 10 years
3. Do you fill the role as incident commander on incident scenes?
    a. Yes
    b. Yes, but only occasionally
    c. No, then your survey has concluded
4. Approximately how many significant incidents have you commanded (fires, extrications, hazardous materials)?
    a. Less than 15
    b. 15 to 25
    c. 25 to 75
    d. Over 75
5. During emergency incidents, how do you make decisions?
    a. Analytically – you attempt to find a perfect solution to mitigate the incident.
    b. Intuitively – you find the first solution that works to mitigate the incident.
    c. A combination of both
6. How do you assign tactical and strategic priorities during emergency incidents?
    a. Based on Standard Operating Procedures?
    b. Based on your experience?
    c. Based on what you see, smell and feel?

d. All the above

7. Does your department or organization offer training to prepare your personnel for the IC position?

   a. Yes

   b. No

8. Do you feel you have the knowledge, skills and abilities to function as an incident commander on all types of incidents?

   a. Yes

   b. Somewhat

   c. No

9. What do you feel is the most significant factor influencing a command officers' proficiency and consistency as an incident commander (IC)?

   a. Education (e.g. NFA or OFA IC classes)

   b. Experience (time on the job)

   c. Education and experience

   d. Practice (e.g. training scenarios, simulations)

   e. Experience and practice

   f. Internal factors (e.g. stress)

   g. External factors (e.g. noise, weather)

10. Which of the following skills do you feel are the most essential for IC to possess for effective IC command decisions?

   a. Communications

   b. Adaptability

   c. Sound decision maker

   d. Technically skilled

   e. Ability to manage risk

   f. Effective problem recognition

   g. Understanding of tactics of command

11. What type of training do IC need?

    a. FG Risk Assessment
    b. FG Tactics
    c. FG Strategies
    d. Accountability
    e. Building Construction
    f. Fire Behavior
    g. Incident Command System
    h. No training is needed

12. What are the best ways to deliver trainings to IC?

    a. Classroom training - Lecture
    b. Post Incident Analysis
    c. Table-top exercises
    d. Hands-on training
    e. Job shadowing
    f. Simulation training
    g. Self-learning – reading

APPENDIX I – RESULTS OF EXETERNAL SURVEY

Figure 1: What is your current rank?

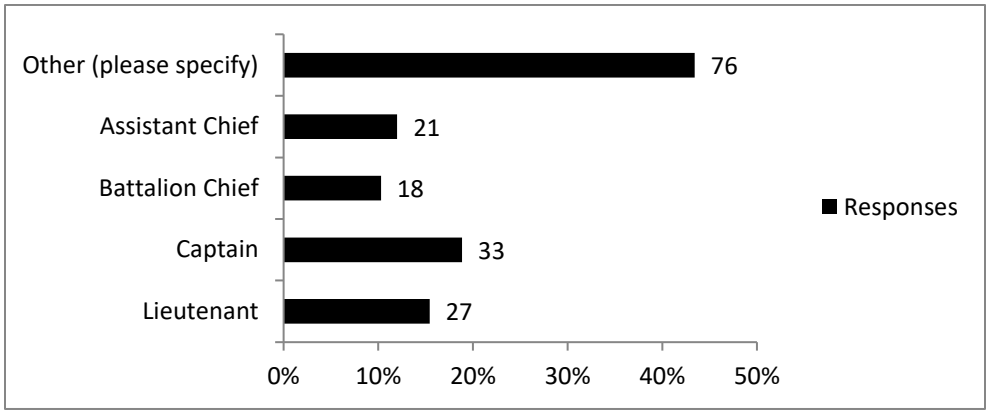

Figure 2: How many years have you served at this rank?

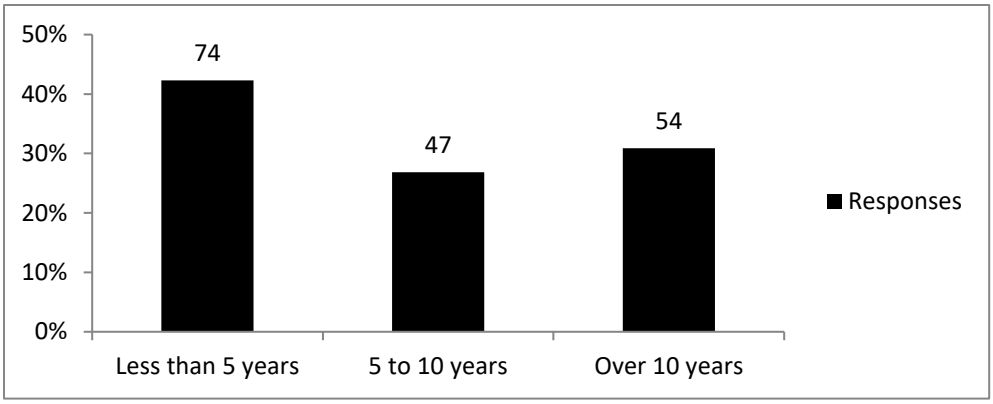

Figure 3: Do you fill the role as the overall incident commander on incident scenes?

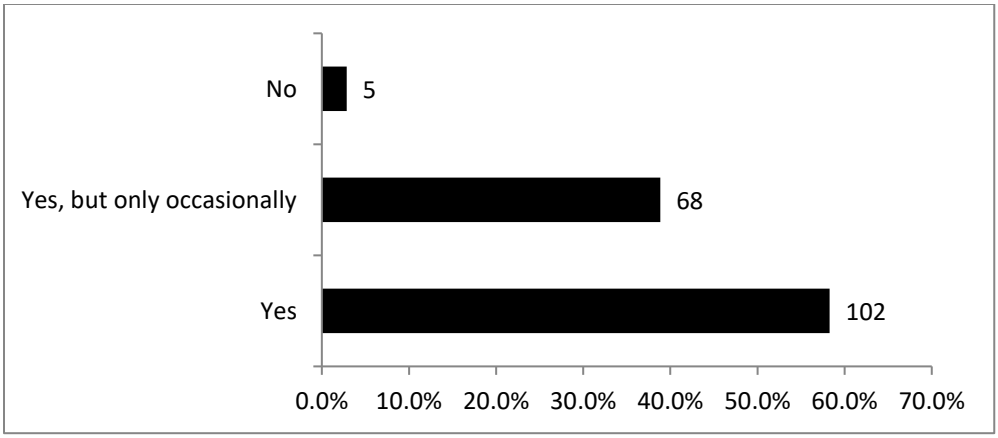

Figure 4: Approximately how many significant incidents have you been the overall IC (e.g. building fires, vehicle extrications and/or hazardous materials)?

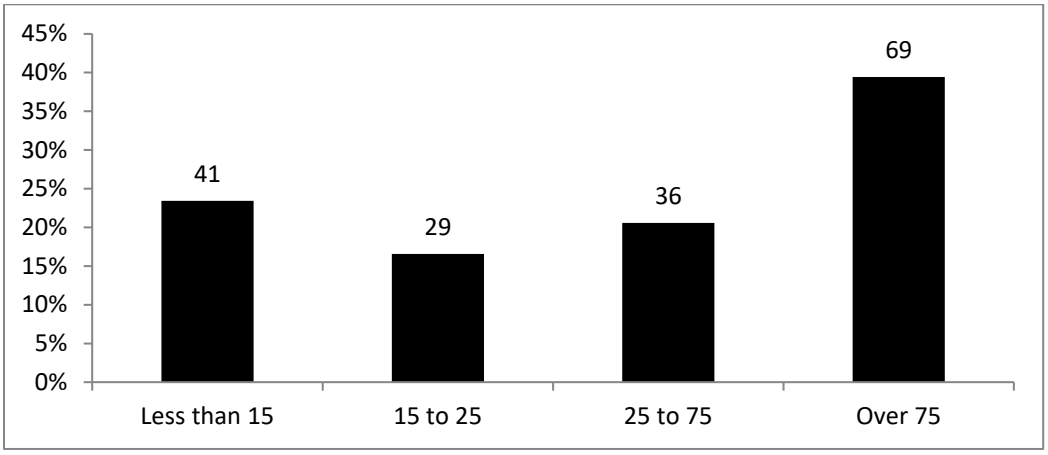

Figure 5: As the overall IC, how do you make decisions?

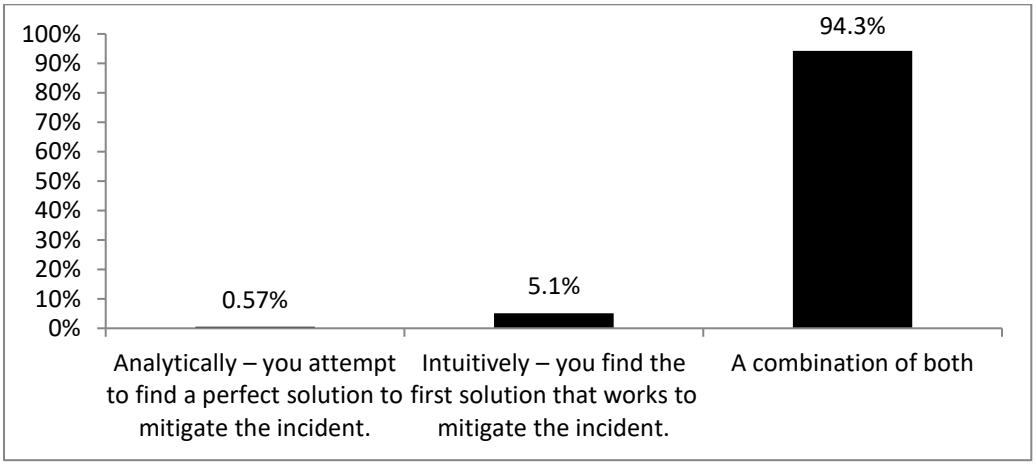

Figure 6: As the overall IC, how do you assign tactical and strategic priorities during emergency incidents?

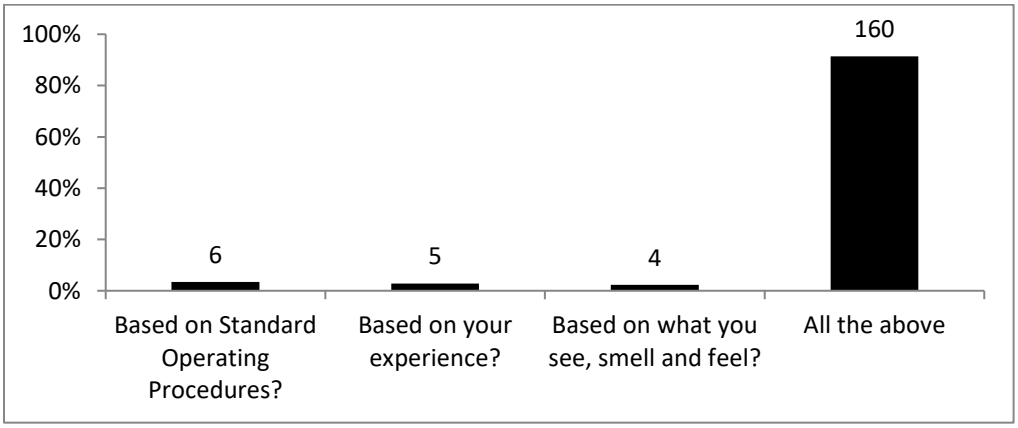

Figure 7: Does your department or organization offer formalized training to prepare you for the overall IC position?

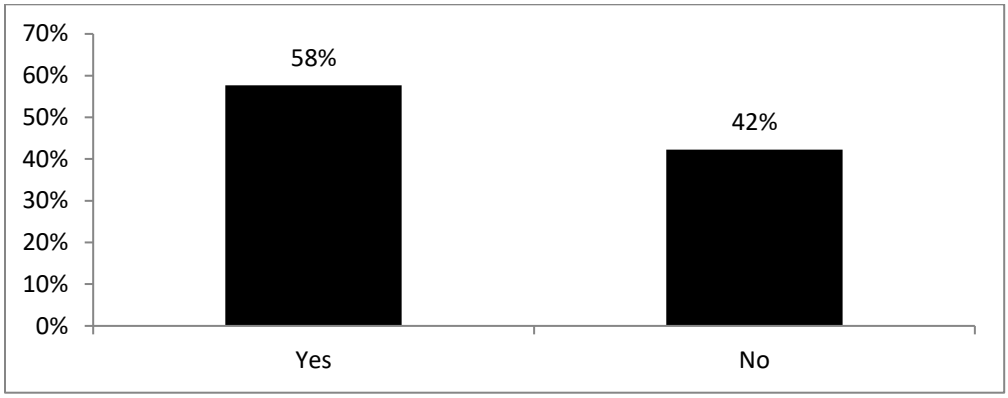

Figure 8: Do you feel you have the knowledge, skills and abilities to function as the overall IC on most types of incidents (e.g. building fires, vehicle extrications and/or hazardous materials incidents?

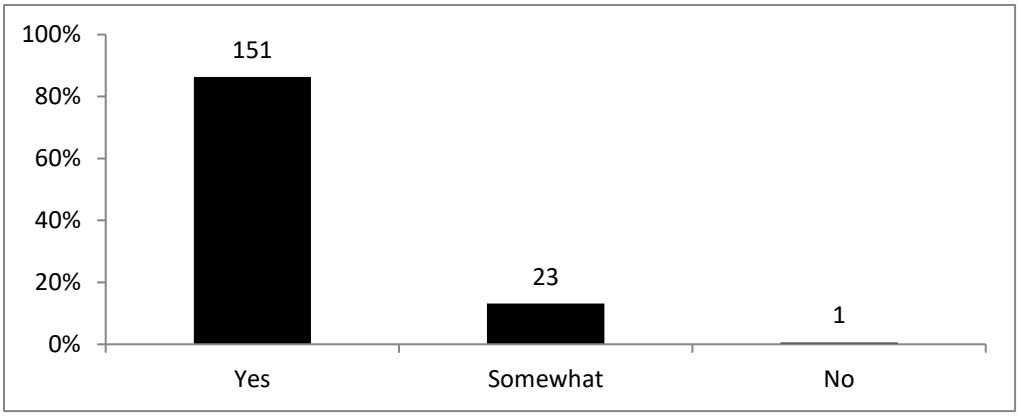

Figure 9: What do you feel is the most significant factor influencing a command officers' proficiency and consistency as the overall IC?

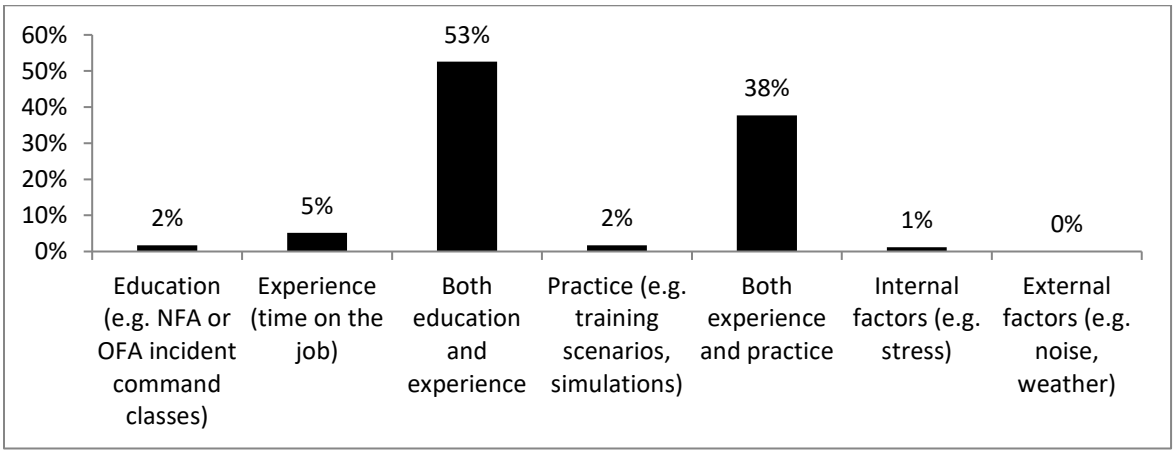

Figure 10: Rank the following skills from most essential to least essential for overall incident commanders to possess for effective IC decision making (higher the score more essential).

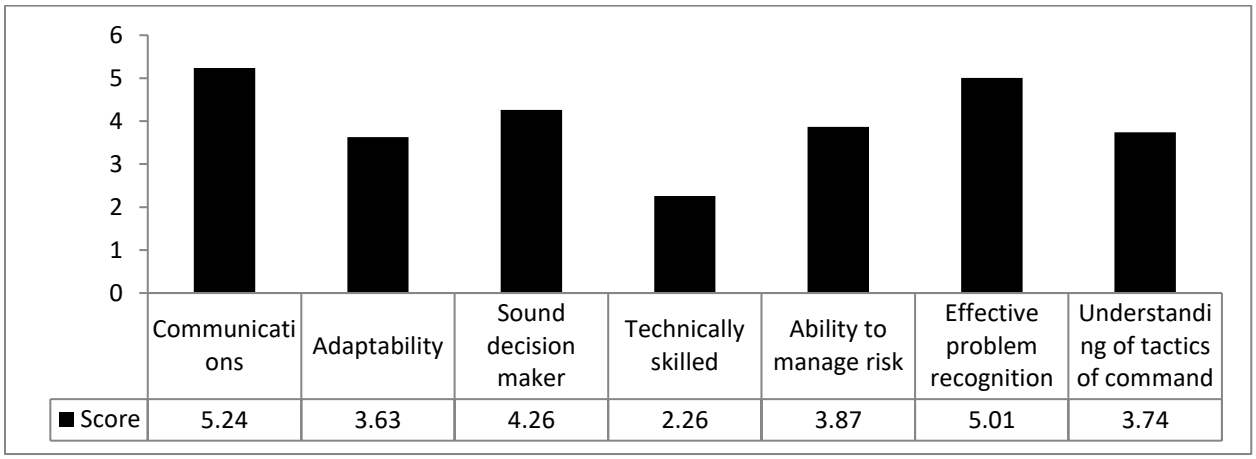

Figure 11: What type of training would best serve incident commanders (higher the score the better)?

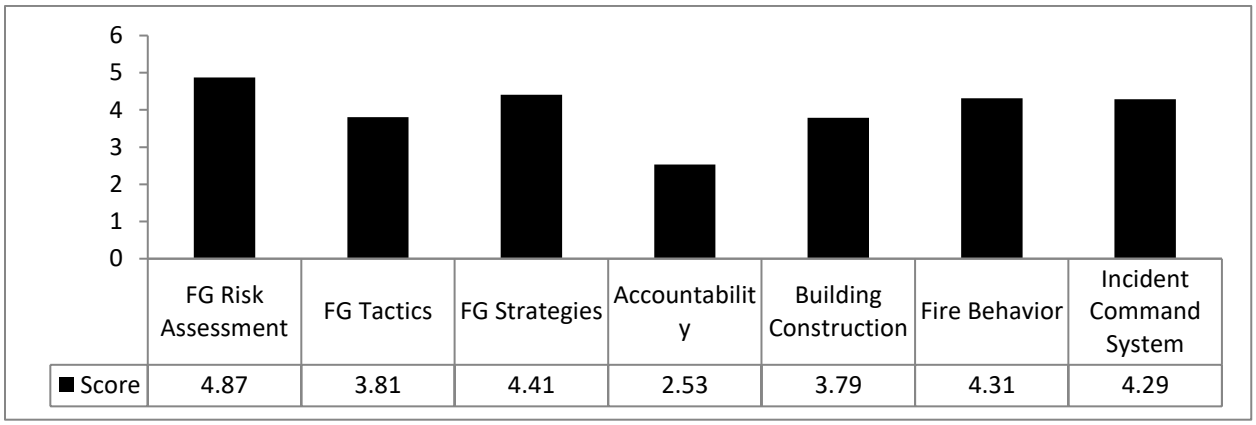

Figure 12: What is the best method of training to prepare incident commanders (higher the score the better)?