

Are Crew Leaders Prepared to Lead and Manage in High Stress Situations?

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A research project submitted to the Ohio Fire Executive Program

06 January 2021

CERTIFICATION STATEMENT

I hereby certify that the following statements are true:

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2. I have affirmed the use of proper spelling and grammar in this document by using the spell and grammar check functions of a word processing software program and correcting the errors as suggested by the program.

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ABSTRACT

The problem this research project addressed is that selected personnel are unprepared to function as crew leaders. The role of crew leader is vital to the success of the Blue Ash Fire Department. Crew leaders act as supervisors in the absence of a promoted company officer. Blue Ash Fire Department lacks a formal method for selecting and preparing personnel to serve as crew leaders. Research has shown that historically, seniority was often the most utilized method of selecting crew leader.

The purpose of this study was to identify and describe performance objectives and expectations of crew leaders. The researcher utilized a literature review and four separate surveys to answer the following questions in this descriptive research.

1. What are current performance expectations and qualifications for serving as a crew leader?
2. What training standards and criteria can be utilized to prepare crew leaders?
3. How do other departments select and prepare out of class officers?

The results of the research indicated that Blue Ash Fire Department lacks predefined qualifications to serve as crew leader as well as any formal training to prepare them. Blue Ash Fire Department should consider the recommendations in this report to ensure that qualified and well prepared personnel are serving as crew leaders and leading their members in high stress situations.

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INTRODUCTION

Statement of the Problem

Firefighters are called upon for a wide variety of emergency services. Company officers provide vital leadership and critical decision making to keep their crews safe and provide high quality services. It is widely accepted that the company officer is the most important role in the fire service. When the company officer takes leave from work, someone needs to step up and act in the role of acting company officer. The Blue Ash Fire Department (BAFD) identifies this role as crew leader.

The BAFD often utilizes crew leaders to fill in for company officers who are on leave, making this role vitally important. When fire apparatus arrives to serve the public, they are not concerned who is riding in the officer seat, they demand competency and effectiveness. When a crew arrives on a scene that requires critical decision making, the crew also demands competency and effectiveness from the crew leader. Historically, BAFD has encountered issues resulting from the crew leader being unprepared or making poor decisions. At times the crew leader is selected based on metrics that may not be adequate. An unqualified or unprepared crew leader can put their crew in jeopardy, and impact services rendered. This creates safety and monetary concerns in the event someone is injured, and directly affects the efficiency of service delivery.

As one example, a crew leader was assigned to a fire engine at the outlying station. Units were dispatched to a structure fire in their first due response area. The fire apparatus operator apparently did not know how to navigate to the incident location. This engine was significantly delayed, the last of the initial complement to arrive at a working fire in their first due area. When drive camera footage was reviewed, the apparatus operator referenced the map book while they

were driving. This is an unsafe practice which jeopardizes the crew and the public on the roadway. The crew leader did not assist the driver with navigation to the incident scene. The apparatus responded to the incorrect address and was disoriented. The delay in response negatively impacted operations on the fire ground. The apparatus operator was a part time employee who chose to resign during the disciplinary process for several safety violations. The crew leader was never disciplined. The problem this study addressed is that selected personnel are unprepared to function as crew leaders.

Purpose of the Study

The purpose of this study was to identify and describe performance objectives and expectations of crew leaders. Often times, crew leaders are selected because of their experience level in terms of seniority. Crew leaders are selected because their superior officers feel they understand what daily tasks are expected of a crew. At times, crew leaders struggle when they have to lead and manage in high stress situations. More merit may be given to a crew leader candidate because they know the mail needs to run by 5:00 PM, with much less consideration given to the fact that they need to be competent and effective in high stress incidents, or training evolutions.

This study will determine the areas that can be improved in regards to crew leader selection and training. This research will be utilized by the fire department leadership to develop a formal method of selecting and preparing crew leaders.

Research Questions

The following questions were answered by this descriptive research:

1. What are current performance expectations and qualifications for serving as a crew leader?
2. What training standards and criteria can be utilized to prepare crew leaders?
3. How do other departments select and prepare out of class officers?

BACKGROUND AND SIGNIFICANCE

The City of Blue Ash is located 14 miles northeast of Cincinnati Ohio. The City of Blue Ash is a progressive city and utilizes a council/manager form of government. The population of Blue Ash is estimated to be 12,372 (U.S. Census, 2019). The daytime population in Blue Ash rises to approximately 55,000 due to the amount of business, commerce and industry in the city. According to the 2018 Annual Report, BAFD responded to 2,732 total calls. 932 of these calls were fire runs and 1,800 were for emergency medical services (Blue Ash, 2018).

The primary objective of BAFD is to provide fire, rescue and life safety services, as well to promote health and well-being to citizens and visitors of the city. BAFD operates two fire stations. The headquarters station houses one rescue pumper, one aerial ladder and two advanced life support ambulances. The aerial ladder is cross staffed by the paramedic crew when needed; the engine crew cross staffs the second advanced life support ambulance if needed. This ambulance would actually be the third ambulance dispatched because the outlying station responds to overlapping emergency medical calls. The outlying station houses one fire engine, and one advanced life support ambulance. Depending on staffing, these units will be cross staffed by a single crew, responding on a first emergency first basis.

The BAFD is a career/part-time combination fire department. The fire department consists of 45 members, led by a fire chief assigned to a 40-hour work week. Three shift captains report directly to the fire chief. Shift captains work 24 hours on duty, 48 hours off duty. Shift captains are responsible for all daily operations of the fire department. The current shift captains share the responsibility of the operations division. Other administrative duties of the shift captains include personnel, public outreach, policy writing and equipment maintenance. Shift captains staff a command vehicle and are responsible for incident command on both large and small-scale incidents. The current three captains of the BAFD have a combined 72 years of service and experience.

The next leadership rank is fire lieutenant, which reports to the shift captain. BAFD currently has six fire lieutenants, assigned to work 24 hours on duty, 48 hours off duty. Fire lieutenants are vitally important to the success of the fire department. Fire lieutenants are company officers of first due fire apparatus and have considerable responsibility for the initial arriving decisions and safety of their crew. Lieutenants are faced with high stress decisions in extremely time sensitive situations. The safety of the public and the crew hinges on the competency of the lieutenant. Since 2019, BAFD has promoted four firefighters to the rank of lieutenant. Each of the four new lieutenants acted in the role of crew leader prior to promotion.

Beneath the lieutenants are six full time firefighter paramedics, and two part-time firefighter/emergency medical technicians per shift. When the lieutenants are on approved leave, they create a significant vacancy. In their absence, a full-time firefighter is selected to ride in the officer seat of the apparatus, with seven percent pay incentive. BAFD calls this important position the crew leader. One challenge of this position is that the crew leader has the same fire

ground responsibilities of a promoted officer, however, does not have the disciplinary power or responsibilities of a promoted officer. The BAFD organizational chart is shown in figure 1.

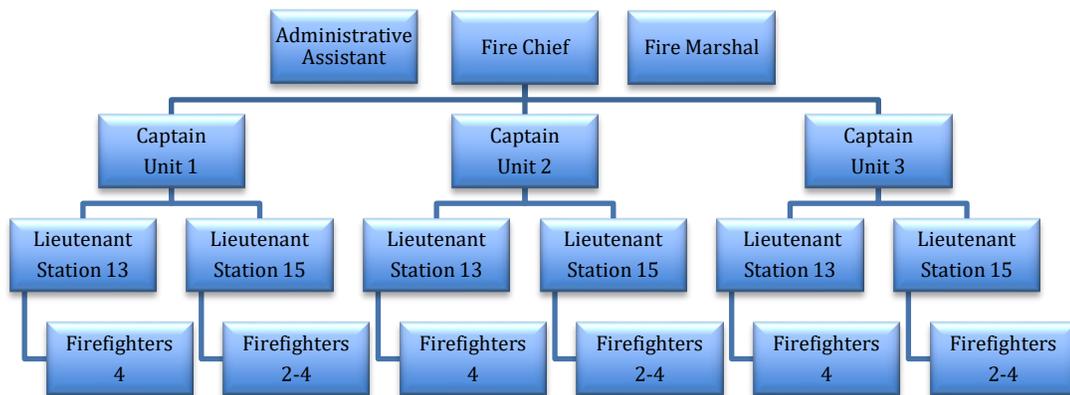


Figure 1.

The organizational chart of the Blue Ash Fire Department

If a serious safety violation were to occur, the crew leader is enabled to stop the unsafe act. Would the firefighter respect the crew leader and stop the action? In the event of a policy violation, the crew leader can only forward relevant information about the infraction to their promoted company officer. The company officer then needs to determine what infraction occurred, what policies may have been violated and what necessary interventions are needed. For instance, if a firefighter were to be tardy, the crew leader must be trusted to inform their supervisor, a promoted officer, of the infraction. The promoted officer would then need to take action. In the possible absence of both company officers on a shift, this infraction would proceed to the administrative level of the fire department, the shift captain. This can place the crew leader in an undesirable position to incriminate their peers. The crew leader must understand the

importance of policy and their effects on department operations. If a serious infraction were to occur, the crew leader must be trusted to forward the information to their supervisor. BAFD has written policies and guidelines that cover both operational and administrative duties. Policies and guidelines are acknowledged by all department members and enforced. All policies and guidelines are readily available online to all members.

There have been instances when a firefighter and crew leader have had a difference of opinion. Disagreements between a crew leader and a firefighter are rarely productive. In one instance, a crew leader approached their company officer with a written complaint that a firefighter under their supervision was argumentative, disobedient and difficult to work with. The complaint stopped short of labeling the disagreement as insubordination. This information was forwarded to a promoted lieutenant who investigated this situation, with a finding of divergent perspectives. It is possible that this situation can be caused when the firefighter feels jaded that they were not selected to be crew leader, or that they do not feel comfortable with the crew leader that was selected. Formal, predefined and communicated metrics to select crew leaders will positively impact this issue.

Lieutenant candidates are competitively screened prior to promotion. Lieutenant candidates go through a promotional process that includes interviews and oral assessment centers. Lieutenants are currently required to obtain Fire Officer I and II within two years of promotion. Lieutenants also are required to complete Blue Card training, an interactive incident command and tactical decision-making class. Lieutenants receive annual officer development training to better prepare them for the challenges they face every day. Crew leaders do not currently receive any formal training to prepare them for their role. BAFD fully supports officer development and will send employees to officer development classes. For the crew leader

position, it is completely up to the employee to request the training. The city also provides a generous tuition reimbursement program for college courses and professional development.

The selection of crew leaders is the sole discretion of the company officer, creating a subjective format. There have been instances where employees have been allowed to act as crew leaders on one shift and denied the opportunity from officers on different shifts. Often times, seniority is the leading factor when selecting a crew leader. This creates a problematic situation. One day, a highly trained, prepared and promoted officer is assigned the very important role of company officer. The next shift, when a lieutenant or even a captain is on leave, the individual assigned to that same important role could simply be the most tenured employee, with no formal officer training at all. When the public calls for service, they demand competency and effectiveness. The public is not concerned about the difference between a qualified crew leader and a promoted lieutenant. The crew of the apparatus expects their best interest and safety to be at mind, no matter who is riding the front seat.

BAFD has experienced disciplinary related issues with personnel acting in the capacity of crew leader. In one instance, a crew leader was assigned to a fire apparatus, staffed with two people. This engine first responded to an emergency medical call at a nursing home. Company officers are well aware that at this nursing home, fire apparatus is prohibited from responding up the drive to the front door of the nursing home. This is due to the potential for damage to occur to the apparatus. The fire apparatus operator proceeded to respond up the driveway to the front door. In doing this, the apparatus struck a retaining wall built of railroad ties. Damage was incurred to the apparatus. Post investigation, the crew leader assigned to the apparatus was disciplined. The employee, an experienced and competent crew leader, refused all future opportunities to be crew leader as a result of the discipline, which they felt was unjust.

In a more recent instance, the department was short on qualified apparatus operators. An engine company was dispatched to an emergency run. Due to a shortage of operators, a seasoned lieutenant with 29 years of experience was required to drive the apparatus to the scene. As a result, a young and inexperienced part time employee was riding in the officer seat of the apparatus. This part time employee was not a qualified crew leader. The engine was clearing a difficult, congested intersection and was involved in a very serious motor vehicle accident. It should be noted that the fire apparatus and crew was not determined to be at fault, however, with a qualified fire apparatus operator and a qualified officer or crew leader riding in the officer seat, it is probable that this incident may have been avoided.

The BAFD has a policy that no unit shall accept a disregard from a dispatcher or 911 caller (BAFD, 2020). In a recent incident, a crew leader was responding to a busy recreational area in the city. While responding to the incident, the dispatcher relayed to the crew that the caller was requesting a disregard. In apparent ignorance to policy, the crew leader accepted the disregard and placed their unit available for service. A short time later, the unit was re-dispatched to the same incident and encountered a significant mechanism of injury. This crew leader's apparent ignorance of policy led to a delay in appropriate patient care and intervention.

These are just a few examples that illustrate a problem in the selection, preparation and training of employees who are expected to work out of class as crew leaders. This problem is not new and the results of this study could be far reaching in the organization. In March of 2019, the BAFD underwent a significant restructuring. Prior to this restructure, the chain of command consisted of the fire chief and an assistant fire chief assigned to a 40-hour work week. Below the administration were six lieutenants, each assigned to work 24 hours on duty, 48 hours off duty. The lieutenant assigned to headquarters rode in the officer seat of the fire engine. The lieutenant

assigned to the outlying station operated a command vehicle. The lieutenants would rotate every six months, which provided the opportunity to gain experience in the command vehicle.

The restructure leaves the assistant chief position vacant and promoted three existing lieutenants to the rank of captain, who now operate the command vehicle out of headquarters. When a captain is on leave, a lieutenant rides out of class, in the command vehicle as the shift supervisor. This is a large responsibility that cannot be underestimated. Three full time firefighter paramedics were then promoted to back fill the lieutenant positions. The newly promoted lieutenants have less than one year of experience as an officer. Nine months ago, they were firefighters, occasionally riding out of class as crew leaders and in that short time, they are now lieutenants riding out of class in a command vehicle. New lieutenants are still adapting to their role and the organization also expects them to operate out of class in the absence of a captain when needed. While the organization needs to assess the preparation of crew leaders, they now have a new out of class assignment that is equally as important. It's imperative that any lessons learned from this research project be applied to lieutenants riding out of class in the captain position as well.

If the BAFD can identify where improvement is needed in the area of crew leader preparation, they can standardize the selection and preparation process. The potential impact this study could have on BAFD is to ensure qualified and well-prepared personnel are leading their most valuable asset, their people, into hazard zones. This benefit would extend to current lieutenants who are riding out of class in the captain position as well. This process should be utilized to identify officer candidates and should be a steppingstone for employees interested in promotion. The BAFD will benefit from safer leadership, more efficient crews, and an effective officer development program.

LITERATURE REVIEW

In the latest edition of the *Company Officer Handbook* (International Association of Fire Chiefs), they evaluate professional development methods. They found that professional development takes place in three ways; experience, mentoring and education. They find the typical approach to develop employees is to send them to classes and assume they have adopted the lessons learned. In fact, they reference Michael Lombardo & Robert Eichinger (2002) who state that the most common approach to employee development consists of 70 percent education, 20 percent mentoring and 10 percent experience. They also suggest that what actually works for employee development is a different approach consisting instead of 10 percent education, 20 percent mentoring and 70 percent experience. This means organizations should teach their employees competencies, and provide them valuable, structured experience because people learn best from high quality and relatable experience.

The National Fire Protection Association (NFPA) is one of the most widely regarded organizations in the American fire service. The NFPA describes themselves as “a nonprofit organization established in 1896 devoted to eliminating death, injury, property and economic loss due to fire, electrical and related hazards” (NFPA, 2020). The NFPA has developed 300 codes and standards, many of which were developed for the fire service. In many cases, the standards developed by the NFPA are merely recommendations not mandated by law. In some cases, federal or state Occupational Safety and Health Agencies (OSHA) have incorporated NFPA standards into mandated regulations. In litigation, fire departments may be liable for negligent performance of their duties. Negligence can arise from violations of standards of care, such as NFPA standards (NVFC, 2014).

NFPA 1021 is the *Standard for Fire Officer Professional Qualifications*. NFPA 1021 encourages prospective fire officers to consider formal higher education as part of their educational and professional growth, while maintaining current knowledge. (NFPA 1021, 2014). NFPA 1021 chapter four also states that candidates for fire officer I should meet the qualifications of firefighter II and fire instructor I. They also state that fire officers should be able to assign tasks to unit members, given an assignment at an emergency incident, so that the instructions are complete, clear and concise; safety considerations are addressed; and desired outcomes are conveyed.

NFPA 1561, *Standard on Emergency Services Incident Management System and Command Safety*, contains very relevant information for the organization in regard to crew leader preparation and training. In chapter three, the NFPA defines a supervisor as “An emergency services responder who has responsibility for overseeing the performance of other responders assigned to a specific division or group” (NFPA, 2020). Because the crew leader is responsible for their company in a hazard zone, they meet the NFPA definition of supervisor. Chapter four of NFPA 1561 outlines the system qualification process. Section 4.8.1 reads “ESO’s (emergency service organizations) shall develop and implement a qualification process specific to their organization to ensure members who function in the incident management system are qualified to function in incident management positions in the types of incidents that the ESO would be expected to respond to” (NFPA, 2020). This is particularly important because BAFD places their crew leaders in the position to be initial arriving incident commander.

NFPA 1561 also addresses the training of crew leaders. Section 4.9.3 reads “responders who are expected to perform as incident commanders or to be assigned to supervisory levels within the incident command structure shall be trained in and familiar with the incident

management system and the particular levels at which they are expected to perform” (NFPA, 2020). Section 4.9.3 also states “The ESO shall define training and experience requirements” (NFPA, 2020). Chapter five of NFPA 1561 specifically addresses supervisory personnel. Section 5.8.2 states, “Supervisory personnel shall assume responsibility for activities within their span of control, including responsibility for the safety and health of responders and other authorized persons within their designated area” (NFPA, 2020). Chapter five also details supervisory awareness. Section 5.8.9.1 reads, “All supervisory personnel shall maintain a constant awareness of the position and function of all responders assigned to operate under their supervision”.

In recent surveys, chief officers across the nation were asked what they believe the most important tasks a new officer should perform well. They listed; beginning of shift report, notifications, decision making and problem solving. (IAFC. Fire officer principles & practice. 2015). These are daily tasks that crew leaders also need to be able to perform in the absence of a promoted company officer. The National Institute for Occupational Safety and Health (NIOSH) investigates every firefighter Line of Duty Death (LODD) in the United States and publish a comprehensive report to discover contributing factors and create recommendations to prevent further fatalities. A recent NIOSH report lists acting company officers in several key positions as a contributing cause in a LODD in which a firefighter fell down an elevator shaft. This is significant as it happened not far from BAFD. (NIOSH 2015)

As part of the literature review, the researcher reviewed the job descriptions for BAFD firefighter III, fire lieutenant as well as fire captain. There is no job description for the crew leader. One important note is that the job description for fire captain was revised on Jan 8th, 2019. This was in preparation of the re-structure of the command staff for BAFD. Previously,

there was one fire captain who was assigned a 40-hour work week. In the new structure, there are three captains sharing responsibilities. The job description of the fire lieutenant was last revised on July 11, 2014. At that time, there was no administrative officer (captain) assigned to a command vehicle on a 24-hour shift. Fire lieutenants rotated this assignment every six months. There is an overlap in the job descriptions of the fire lieutenant and fire captain. In the general statement of duties for fire lieutenant, it states a lieutenant is a command officer over fire department personnel. (Blue Ash, 2014.) While a lieutenant may be an initial arriving incident commander, the fire captain is the definitive incident commander.

A notable difference between the descriptions of firefighter III and fire lieutenant is the lieutenant is expected to be in command until relieved by a superior officer, and has charge of assigned fire station, squad, or another specialized unit. These responsibilities would be absorbed by a crew leader in the absence of the lieutenant. The required knowledge, skills and abilities (KSA's) of the fire lieutenant are relevant to the crew leader. Because the crew leader is effectively filling in for a lieutenant during a vacancy, they may be held to the same standard. The KSA's of the fire lieutenant include skills in dealing with persons under very adverse conditions and skills in verbal communication. A distinguishing feature of the lieutenant is that a person in this position may be in command until the arrival of a command officer. The decisions made by this initial arriving officer, whether promoted or crew leader, directly impact the outcome of the operation.

Mike Wisko served the Galveston Texas Fire Department as fire chief until 2019. When he was an assistant chief, in 2011, he wrote an article for Fire Engineering Magazine detailing how his organization created an officer development program. It was Chief Wisko's experience that when older members retired, they took vast knowledge and experience with them. His

organization struggled with “less fires, more medical runs, senior officers retiring, younger officers being promoted, and a new generation of firefighters has become the norm” (Wisko, 2011) This created a need to develop future leaders. They found that educational requirements for promotions and incentive pay for education and specialized certifications were successful to create a candidate pool of qualified and educated firefighters. To create an officer development program, they brought all officers and acting officers together to discuss what should be taught to newly promoted and aspiring officers. They set up workshops which included anonymous surveys from participants, inquiring what they learned from previous officers and what they wish they had known prior to promoting. These surveys also inquired what needed to be addressed in department policy and procedure. From here, they were able to identify the following topics for officer development; leadership, public image, communication, department policies and procedures, firefighter safety and operations.

In 2014, Chris Hunt conducted a research project for the Executive Fire Officer Program through the National Fire Academy entitled *Creating a Comprehensive Acting Company Officer Development Program*. Mr. Hunt developed a questionnaire seeking what components are important to prepare a person to act out of class. Fifty-eight percent of his respondents stated incident command training was an important component, while only 25 percent of the respondents actually required incident command training to act as crew leaders (Hunt, 2014).

In 2013, Cameron Haller researched this subject for his organization and the Ohio Fire Executive program. Haller mentions that his organization was attempting to implement career tracks for personnel in his organization. They utilized the *IAFC Officer's Development Handbook* to create these career tracks and implemented them on a volunteer basis. Haller indicated that his organization did not find success from the voluntary program. Haller did not

specify why the program was unsuccessful. Haller also created an external survey, which provided input mostly from the northeast and southeast portions of Ohio. Interestingly, Haller discovered that while 71 percent of the respondents to his external survey utilize a crew leader program, only 25.6 percent provide any training for personnel acting in the crew leader role (Haller, 2013).

Information learned during the literature review was invaluable to this research project. Through the literature review, examples were provided that demonstrate the importance of having competent crew leaders in position. The review also illustrated the importance and legal responsibility of the organization to provide applicable training for crew leaders. The review provided valuable information about professional development models and adult learning styles. Review of BAFD job descriptions pointed out areas that need to be standardized within BAFD. Review of previous research projects helped the researcher to understand what has already been researched on similar topics. All literature reviewed, including documents from the NFPA and IAFC will guide the organization in the selection and preparation of crew leaders.

PROCEDURES

A descriptive research method was used to answer the questions in this research project. The researcher began by completing a proposed problem form. This form required the researcher to reflect on the state of the organization and identify a problem and how it negatively affects the organization. The researcher had to identify information that is missing that would provide insight to a resolution. This form also provided the opportunity to reflect on the potential positive impact the research would have on the organization.

The researcher then conducted a literature review. The literature review was completed to help answer the research questions, and also to obtain what research has already been conducted and what results have been published. A large amount of research can be found about company officer development, but much less literature is available about the acting company officer, or crew leader. All literature reviewed was summarized and sources also cited within. All sources were credited in the references section as well.

In addition to literature review, the researcher authored four separate surveys. All four surveys were carefully crafted and tailored to the different experience levels of the peer group to which they are distributed. Each survey was beta tested by an intended member of each survey population. All personnel groups, including external agencies, were asked to complete the surveys within a three-week window. Three different surveys were developed for three different personnel groups within the BAFD. With 45 members, the BAFD is considered a small department and the researcher understood the importance of participation from a small sample group. The researcher realized that these surveys could appear punitive or invoke fear of incrimination to firefighters and crew leaders. In an effort to encourage participation, the surveys were designed to be anonymous and assess the crew leader program as a whole, rather than individual crew leaders' performance.

Prior to distributing the surveys, the researcher met with all three crews in person. The goal of these meetings was to discuss the surveys and invoke a sense of comfort in completing them. The researcher encouraged participation from each member, stating that the more honest information is gained, the more positive impact this research could ultimately have on the organization. The researcher also stressed to each member that the surveys were anonymous and non-punitive.

One survey was developed for firefighters within the BAFD. This survey was formatted to gauge their perception of the effectiveness and competency of currently selected crew leaders. This survey provided valuable data because employees at this level are directly impacted by the competency of the crew leader. Personnel at this level are familiar with the performance of the crew leader when supervisors cannot see how they perform. This survey collected information about the strengths and weaknesses of the crew leaders. This survey also gauged the crew leader or officer aspirations of the firefighters. Twenty surveys were distributed to the firefighters of BAFD, 70 percent were returned.

A separate survey was also developed and sent to all currently selected crew leaders in BAFD. This survey focused on current crew leaders in regard to their selection, preparation and training. This survey inquired about training and certificates that crew leaders currently hold. This survey obtained information pertaining to areas crew leaders desire more preparation and training. Nine surveys were distributed to this group; 78 percent were returned.

All BAFD fire officers were given a separate survey. This survey assessed the preparation and selection process for crew leaders from the shift supervisor's perspective. This will be an important perspective because shift lieutenants are the ones who select and prepare their crew leaders. This is also an important survey because shift captains assume responsibility for actions on their shift, including decisions and actions from the crew leader. This survey was similar to the survey distributed to firefighters but assessed more detail for the selection process. In the interest of anonymity, lieutenants and captains were both given the same survey. If captains were given their own surveys, the anonymity of the surveys would be compromised. Eight surveys were distributed to this personnel group. One hundred percent were returned.

A final survey was distributed to the leadership of external fire and EMS agencies. This provided an accurate comparison of current standards for selecting and preparing crew leaders between BAFD and other agencies. This survey also provided valuable research in available methods to select and prepare crew leaders. Information obtained included current experience requirements, current qualifications, current selection criteria and any on-going training. External agencies provided valuable data on the effectiveness of the methods they employ. This survey was designed to be simple enough to gather information from as many sources as possible.

The population for this survey was carefully chosen. The researcher reviewed all fire departments in the same county as BAFD. The researcher also reviewed all fire departments in the surrounding counties in southwest Ohio. This included Hamilton County, Butler County, Clermont County and Warren County. After reviewing the departments in all surrounding counties, the researcher identified departments that are similar in size or operations to BAFD. The researcher then e-mailed the survey to the chiefs of all departments selected. All respondents were asked to complete the survey within a three-week time frame. Forty two surveys were distributed to external agencies; 121 percent were returned.

This is likely due to respondents forwarding the survey to their contacts as well. The researcher went through every survey response, removing those that did not fit a similar structure or size to BAFD. Duplicate responses were also received from several departments. This could render data inaccurate. In these instances, the researcher looked at each duplicate survey received from departments and kept the results with the most helpful information, regardless of the rank of the respondent. After filtering the results, 38 relevant surveys remained, for a 90 percent return rate.

Definition of Terms

Supervisor. “An emergency services responder who has responsibility for overseeing the performance of other responders assigned to a specific division or group” (NFPA, 2020.)

Job description. “A narrative summary of the scope of the job. It provides examples of the typical tasks” (IAFC, 2015.)

Company officer. Individual in charge of a crew on a company or apparatus. BAFD utilizes lieutenants as company officer.

Acting officer. Individual working out of class to fill a company officer vacancy, sometimes with pay incentive. BAFD refers to this position as Crew Leader.

Limitations of the Study

Some limitations existed that should be addressed. All internal surveys were carefully designed to be completely anonymous. The researcher spoke to each crew prior to distributing surveys in hopes to encourage honest feedback. Even with these safeguards in place, it is reasonable to expect members to be cautious of rating the performance of their peers and supervisors. This likely manifested in the amount of survey responses from the firefighter rank. This is the largest population in the department but returned the lowest amount of surveys. The crew leader ranks also did not achieve 100 percent participation.

Each crew has more than one crew leader. The crew leader program was assessed as a whole, rather than the performance of each individual crew leader. Members may be more comfortable with one crew leader over another. It is possible, but unknown if this factor affected the results of the surveys. All survey recipients were afforded the opportunity to add commentary, and many chose to do so to address this limitation.

RESULTS

The first research question was; *“what are current performance expectations and qualifications for serving as crew leader?”* To answer this question, a survey was sent to three internal ranks of BAFD; firefighters, crew leaders and officers. Crew leaders were asked if they know what is expected of them when operating as a crew leader. Of the responses, 100 percent stated they do know what is expected of them. Fire officers were also asked if they believed their crew leaders knew what was expected of them when operating as crew leaders. Of the responses, 25 percent stated they believe their crew leaders know what is expected of them, while 75 percent stated they believe their crew leaders *somewhat* know what is expected of them. One respondent expanded on their answer; *“Without the existence of a crew leader "program" within our department, our crew leaders do not have formal training. Expectations of the crew leaders are frequently discussed during official and unofficial trainings with my shift. In my own experience, reviewing a sheet of expectations was ineffective. Allowing our crew leaders to run in the fast attacking command role during trainings allows for them to make the necessary decisions they will be faced with while in that role. Expectations are discussed during these types of trainings and open up the "table talk" session after trainings to discuss expectations.”*

BAFD fire officers were asked if they evaluate the performance of their crew leaders. Only one respondent answered that they do not evaluate the performance of their crew leaders. Officers were then asked how they evaluate the performance of their crew leaders. Possible answers included; “formally on annual performance evaluation”, “informally through discussion when necessary”, “not applicable” and an option was left for “other”. None of the respondents indicated that they formally review the performance of their crew leaders on their

annual evaluation. Seventy-five percent of respondents indicated they review crew leaders' performance informally. One respondent selected "other" and elaborated; *"Issues are addressed both formally through annual evaluation and informally as needed.* One respondent indicated *"not applicable"*.

Current crew leaders were asked if they have been through formal crew leader training presented by BAFD. Of the responses, 57 percent stated they have not received formal training, 43 percent stated they did receive formal training. Respondents were then asked how long ago they received crew leader training. Two responses were received; *"April 2009"* and *"Thirteen years ago"*. Crew leaders were asked if they agree that they have been adequately prepared for their role as crew leader. While 57 percent of respondents indicated they somewhat agreed, 43 percent indicated they were neutral or somewhat disagreed.

Crew leaders were asked to identify which training topics they have completed or were currently attending. Human resources and Incident Safety Officer were included as options but received zero selections. Figure 2 shows the results.

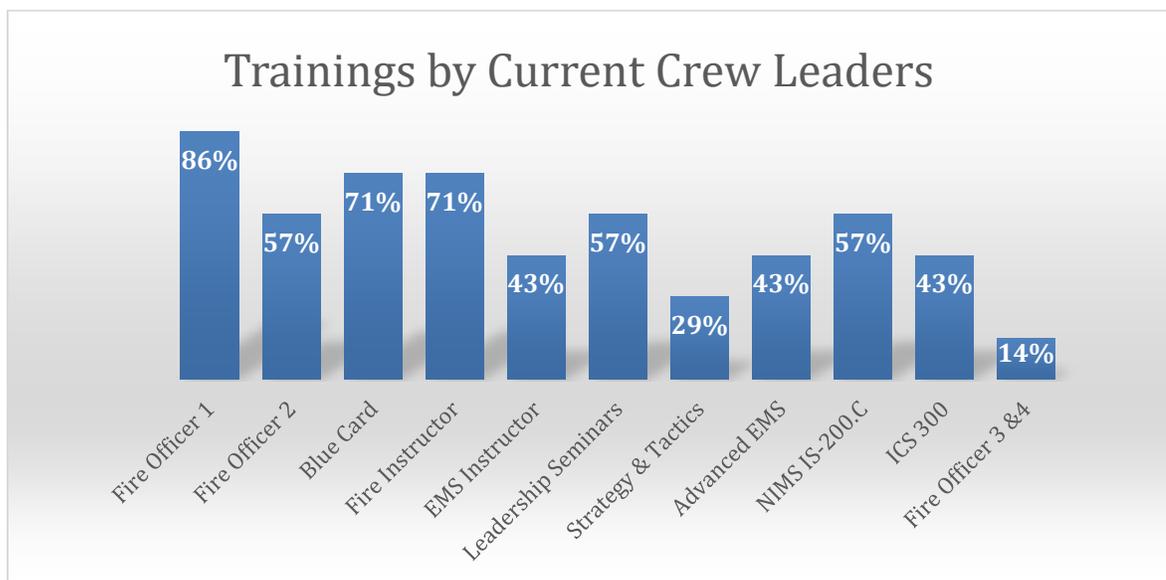


Figure 2.

Trainings completed or currently in process by crew leaders of BAFD as of July 2020.

Fire officers were asked what criteria they used to select the personnel qualified to operate as crew leaders on their crew. The following options were listed, but received zero selections; fire officer courses, fire instructor, EMS instructor, advanced EMS classes. Fire officers were given the opportunity to select “*other*” and add commentary. Three respondents added commentary noting that they did not have input on crew leader selection because the crew leaders on their shift were selected prior to their promotion to officer rank. Results are illustrated in figure 3.



Figure 3.

Criteria used by fire officers to select current crew leaders.

Current crew leaders were asked how much experience they have at BAFD, including both full-time and part-time service. Of the respondents, 57 percent indicated they had 16 or more years of service at BAFD, while 29 percent indicated they had 6-10 years of service and 14 percent indicated they had 3-5 years of experience. See figure 4. Crew leaders were also asked to indicate how much experience they have operating in a crew leader position. Of the respondents, 43 percent indicated they had 11-15 years of experience operating as a crew leader, while 29 percent indicated they had 0-2 years of experience. This is due to the recent promotions stemming from the restructure of the organization. Of the remaining respondents, 14 percent indicated they had 3-5 years of experience operating as a crew leader and finally, 14 percent indicated they had 6-10 years of experience operating as a crew leader. See figure 5.

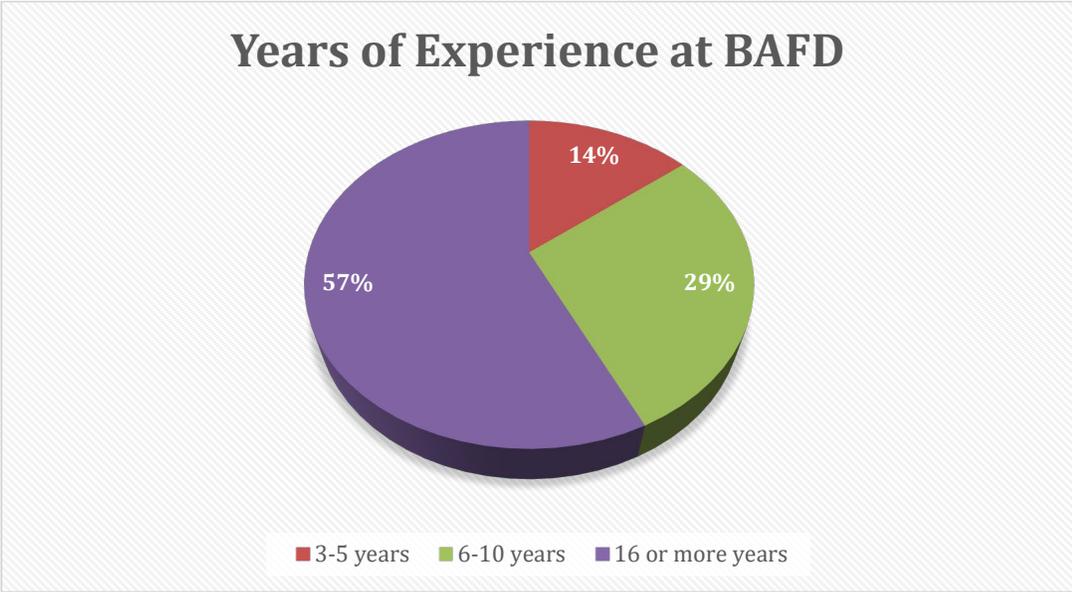


Figure 4.

Years of experience at BAFD from current crew leaders. This includes both full-time and part-time service.

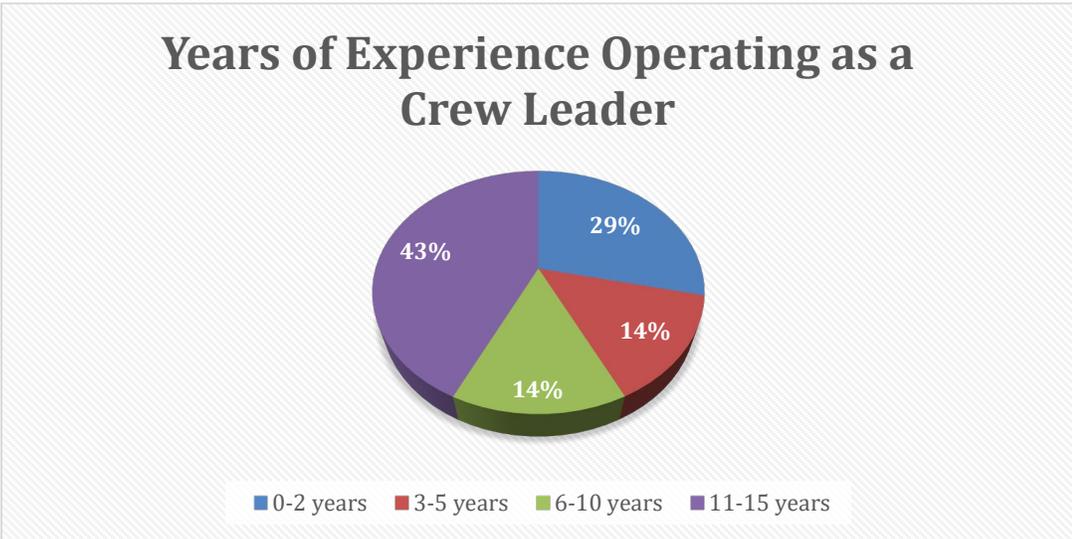


Figure 5.

Current BAFD crew leaders' years of experience operating in the crew leader role.

Fire officers were asked if they feel crew leaders should be held to the same standard as promoted company officers. This question was designed to help gauge the officers' expectations of their crew leaders. Twenty-five percent of respondents indicated they do believe crew leaders should be held to the same standard, while 62.5 percent of respondents stated they do not believe they should. A follow up question asked respondents to explain their thoughts. Responses include;

- *“I think crew leaders need the opportunity to make mistakes to prepare them for the company officer role. We identify crew leaders as a position that is not the title of an officer, why should they be held to the same standard? A crew leader must be proficient on fire and EMS scenes. Hence, why I believe that our crew leaders need to be our top performers as firefighters/medics. We cannot prepare them for every scenario they may encounter. We can only assist them to get better in the decision-making role for when they encounter a low frequency run they may not have experience in.”*
- *“I do not believe they should be held to the same standards as company officers. They are not provided the same information, training, and experiences as company officers. I believe that would lead to members refusing to operate as crew leaders and would lower morale.”*
- *“I think the personnel operating in a crew leader role should be held accountable for their performance. I think their strategy and tactics need to match that of a company officer. Their knowledge of policy needs to be held to the same standard as well. During trainings crew leaders should operate in the company officer role.”*

- *“I feel crew leaders should be taken from the promotion list. It will help develop them for future promotions.”*
- *“They are expected to operate safely and within policy. Promoted officers must be held to a higher standard.”*
- *“In my opinion it wouldn't be fair to compare a crew leader to an officer. The crew leader is functioning in a role that they normally don't whereas this is the officer's role every shift. The daily experience the officer gets in this role gives them a major advantage over the firefighter. I could agree that a senior crew leader can perform as well and sometimes maybe even better than a new officer.”*
- *“Need to be able and accountable for decision making.”*
- *“While they may not be versed at all aspects of the job, they should know the basics of emergency response, personnel management, and where to go if the issue is out of the normal scope of daily operations.”*

The second research question was; *“what training standards and criteria can be utilized to prepare crew leaders?”* There are many resources that can be used to prepare crew leaders. To answer this question, a survey was sent to three internal ranks of BAFD; firefighters, crew leaders and officers. A survey sent to external agencies also provided insight into this question. Crew leaders were asked in what areas BAFD could better prepare them for the role of crew leader. Options included; human resources/personnel management, report writing, incident management, scene size up, understanding external resources and daily tasks and assignments at the fire station. Respondents were given the opportunity to add commentary, one respondent

stated, “*more details on fire alarm and sprinkler reset decisions*”. The results are illustrated in figure 6.

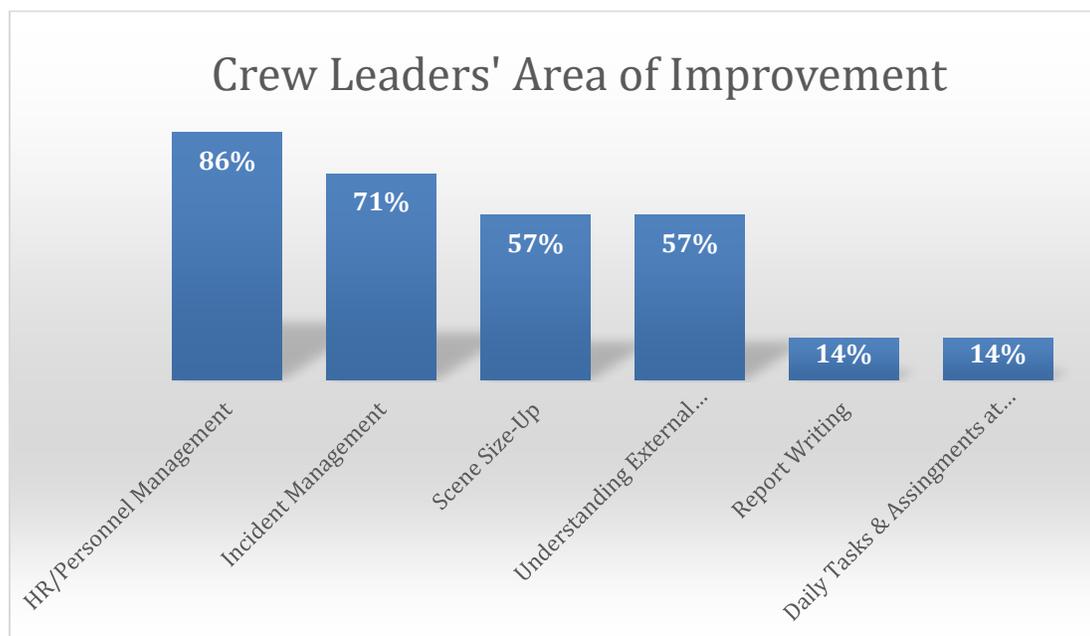


Figure 6.

Crew leaders provided topics in which they feel BAFD could better prepare them.

Firefighters were asked to identify three areas of strength, as well as three opportunities for improvement from their crew leaders. Firefighters were asked to make selections of both from the same options. Options included; maintaining composure on emergency scenes, confidence while making decisions, familiarity with incident management, familiarity with city geography and target hazards, familiarity with department fire and EMS equipment, familiarity with IT and technology, knowledge of policy and standard operating guidelines, keeps crew on task of daily assignments and duties, communicates well with crew, communicates well with public and outside agencies, leadership during training evolutions. Respondents were given the

option of “other” with an opportunity for commentary. One respondent chose the option and commented, “none” for opportunities for improvement. See figure 7.

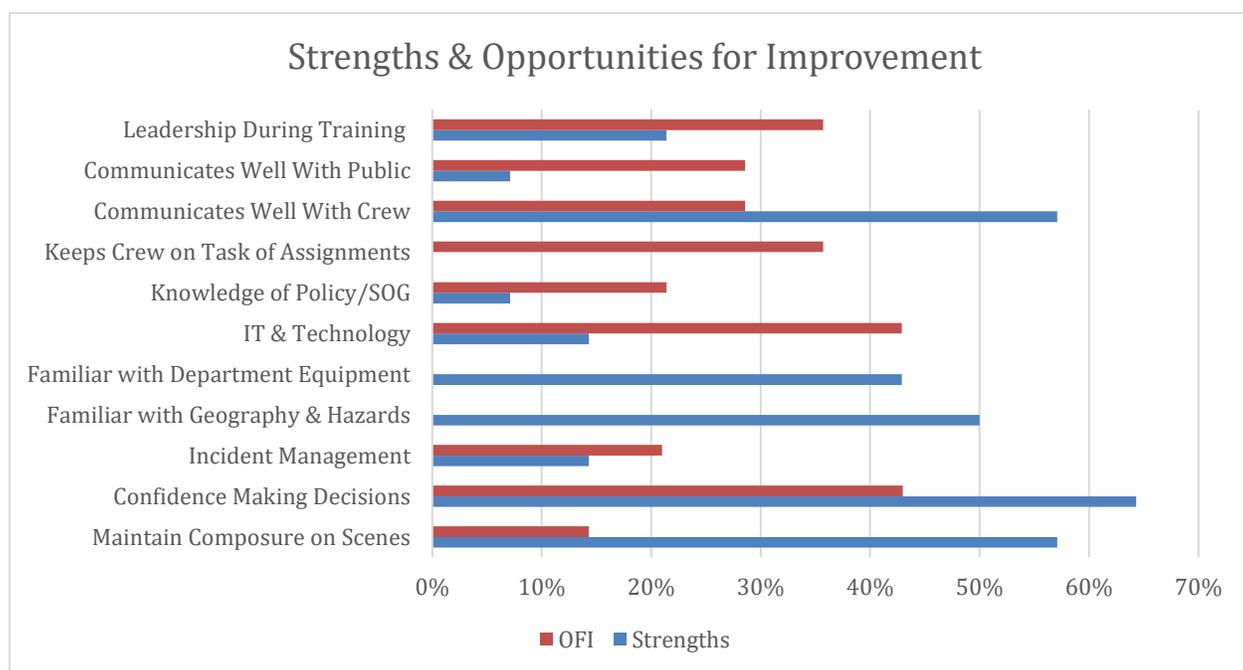


Figure 7.

Firefighters identified three areas of strength and three opportunities for improvement from their current crew leaders.

BAFD fire officers and firefighters were asked if they believed BAFD would benefit from a formal process for selecting members to operate as crew leaders. From the responses, 100 percent of fire officers and 86 percent of firefighters agreed. One firefighter indicated “maybe”, while one firefighter indicated there are no current issues. Both ranks were then asked what criteria should be utilized, results are illustrated in figure 8. Respondents were provided the opportunity to add commentary. One officer stated, “*A written test or years of experience do not*

gauge how well an individual will perform on the job during stressful situations. Assessing an individual's judgement during situations will provide a more accurate depiction of the individual running in the crew leader position". Two firefighters also added additional commentary, one stating; "I feel all these are areas that help define a crew leader but the larger issue is what will maintain their skill level in this position. Another firefighter added, "how well they have performed on high stress incidents in the past".

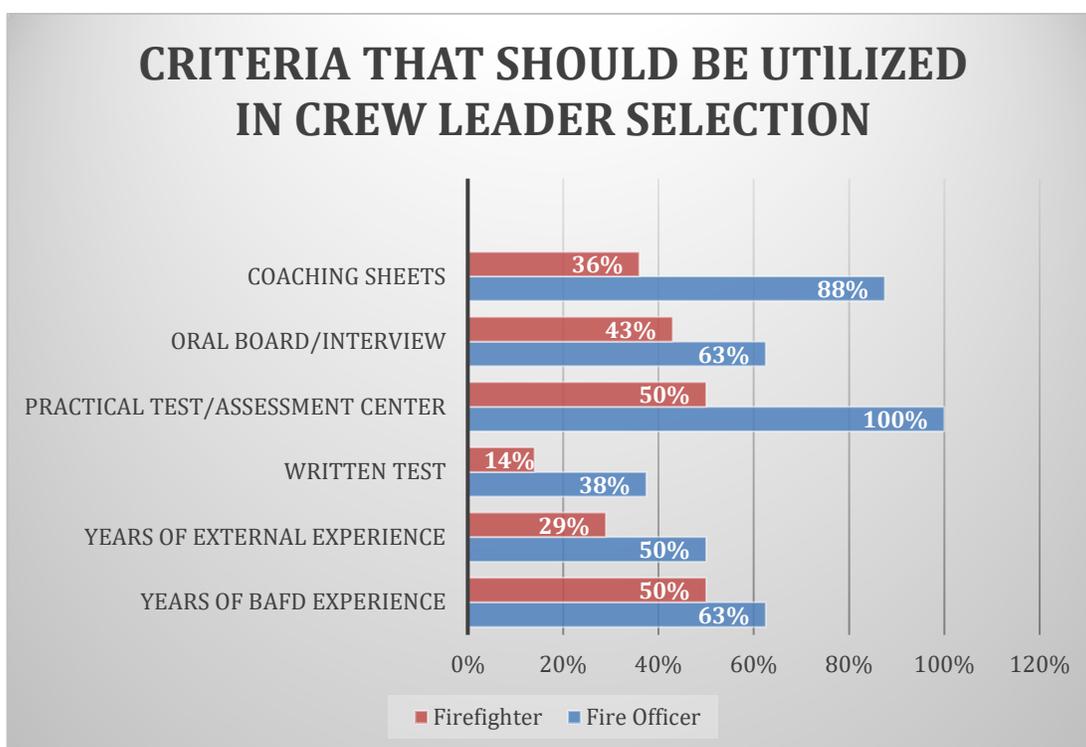


Figure 8.

Firefighters and fire officers were asked what they believed should be considered when selecting crew leaders

Fire officers and firefighters were asked if they feel BAFD would benefit from establishing training requirements for crew leaders. Of the respondents, 100 percent of fire officers agreed, while 50 percent of firefighters agreed and 36 percent selected “maybe”. Both officers and firefighters were then asked to select which training they feel should be required to serve as a crew leader. Options included, “N/A, Blue Card Incident Command, Fire Officer 1, Fire Officer 2, NIMS ICS-300 Intermediate Incident Command System, Fire Instructor, EMS Instructor, Incident Safety Officer, Paramedic and other. Both ranks were given the opportunity to add commentary, the following comments were collected from fire officers.

- *“leadership courses, human resource courses, courses to focus on understanding public service and the role of the department”*
- *“Training on strategy and tactics of fire ground operations and some type of HR class to cover interpersonal communications”*
- *“I think BAFD needs to set up standards so employees know what is expected of them in the crew leader role”.*
- *“Crew leaders need to be a paramedic to provide assistance at the highest level of medical care. Fire officer courses helped myself after I received a promotion to Lieutenant but did not assist me while running as a crew leader for the department. The ability to effectively run as a crew leader came down to knowing my equipment and the ability to use the equipment. Years of experience or taking instructor courses never helped with decision-making or job performance.”*

Firefighters were given the opportunity to add commentary, the following statements were collected.

- *“If the crew leader is aspiring to be a lieutenant, then I feel they should try to obtain as much training as possible regardless of the minimum requirements.”*
- *“What I want out of my crew leader is not for them to be perfect at managing an incident from a command position because for the large amount of our incidents we will have D13 there in a very short amount of time. I want someone who has performed well enough that I trust them to make the right call for mine and their safety inside a fire.”*
- *“I believe the things it takes to be a good crew leader are not taught in a classroom but built through experience. Earned respect of your crew, Proven Leadership on runs and during training evolutions. Decision making ability”*

Results are shown in figure 9.

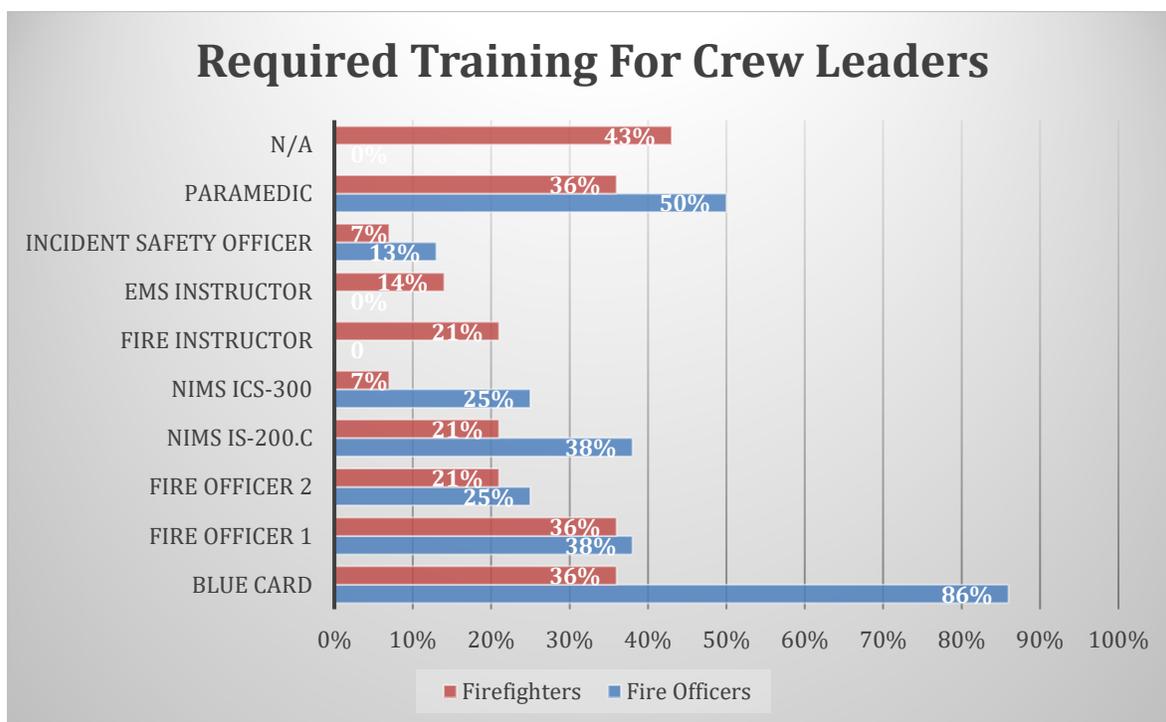


Figure 9.

BAFD fire officers and firefighters were asked which training they feel should be required to serve as crew leader.

Current BAFD fire officers were asked what they wish they were more prepared for, prior to promoting. Of the respondents, 88 percent stated human resources/personnel management, 50 percent indicated report writing, 63 percent stated strategy and tactics while 100 percent of respondents indicated they wish they were better prepared for incident management prior to reporting. Additionally, 25 percent indicated scene size up and 88 percent indicated that understanding external agencies and resources was an area they could have been better prepared for prior to promoting. Two officers added additional commentary. One respondent stated, *“Prior to promoting to Fire Lieutenant, I spent majority of my day training on the departments equipment. Whether I was training myself or the new guy, I was always involved and engaged in trainings. I believe because I knew our equipment so well, the transition for me to my new position was easier. However, prior to my promotion, I was either riding on the medic unit or driving a fire truck. I feel I was cheated out of riding in the backseat of the fire truck. I missed out on many career development opportunities. I missed the opportunity to ask questions and troubleshoot problems with my Lieutenant. By always driving, I rarely had the opportunity to physically get inside the buildings to educate myself on building layouts or troubleshooting problems encountered. In my own opinion, I did not feel ready for my promotion. Over time, I realized the experience I missed out on as a backseat fireman could be a positive. I make great efforts to get inside buildings and when I am inside a building I don't take the opportunity for granted. I really try to teach the new guys the value of having the opportunities to ride in the backseat. Over my time period as a line fireman with BAFD, I have operated under several*

lieutenants. Operationally, I rarely recall discussing tactics with my officers. Majority of the officers never made much of an attempt to get out and physically train with the crew. Often, I was handed a packet and asked to check off a new hire. We did not discuss who was going to be doing what on the fire ground and as a company we missed out on the opportunity to build true crew integrity. I enrolled in a Fire Officer 1 course after I was asked to do so by my officers on a review. I do not believe that assisted me in the crew leader role. I wish I would have placed more emphasis on hands-on trainings rather than worrying about officer level trainings. I really wish I was more prepared with external agencies and available resources prior to promoting. That wasn't something I ever thought much about as a line fireman. Prior to my promotion, I do not recall a single time ever operating as a crew leader in a training. I believe by allowing for the crew leaders to operate in this role, they will have the opportunity to learn and make decisions - both right and wrong. Lastly, my first time running as a crew leader, I was told I was going to be running in that role the shift before. There was nothing mentioned during a review period, etc. that I would even be transitioning into that role.”

The third research question was, “*How do other department’s select and prepare out of class officers?*” To answer this question, a survey was sent to external agencies in southwest Ohio. Of the respondents, 58 percent were combination part time/career, and 42 percent were career only. External agencies were asked if they normally assign a promoted company officer to the officer seat of fire apparatus. The vast majority, 92 percent, indicated that they assign promoted officers to the apparatus. Only five percent indicated that they do not. One respondent stated they always have an officer on duty, but they may operate out of a command vehicle.

Respondents were then asked if they utilize an “acting officer” in the absence of the promoted company officer. On the external survey, the crew leader position was referred to as

“acting officer”, as this is a widely accepted term amongst external agencies. Eighty-nine percent of respondents stated they do utilize an acting officer in the absence of a promoted company officer. Only 8 percent of respondents stated they do not utilize an acting officer. While 89 percent of respondents stated they utilize an acting officer, 76 percent indicate they have set criteria in order to be an acting officer. Seniority was the main criteria for 3 percent of respondents and 16 percent indicated they do not have set criteria. Of those that utilize an acting officer, 63 percent provide the acting officer with pay incentive. External agencies were asked how many years of service they require a member to have in order to be an acting officer. Eleven or more years was an option but received zero selections. Results are shown in figure 10.

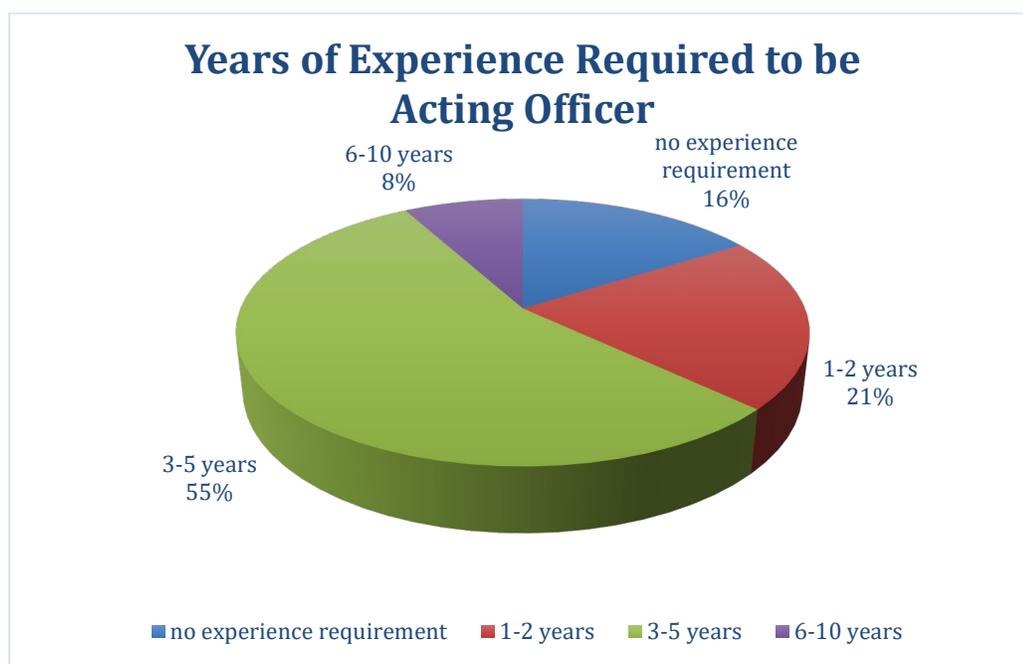


Figure 10.

External agencies' years of service requirement to be acting officer.

External agencies were asked what type of training is required to be an acting officer. Options were provided and the respondents were given the opportunity to add commentary. Of the selections provided, results are illustrated in figure 11. While not provided as an option on the survey, 18 percent of respondents added commentary describing an internal coaching program with a successfully completed check off packet as a pre requisite for acting officer. Several respondents indicated eligibility list requirements for acting officer, these comments will be discussed later.



Figure 11.

External agencies' requirements to be acting officer.

External agencies were asked how they require acting officers to prove competency prior to operating as an acting officer. Options included; “we do not require candidates to prove competency”, “informal observation from promoted officers”, “written test”, “practical test” and

“coaching sheet or mentor packets”. An option of other was added with opportunity to add commentary. Several respondents added commentary in reference to eligibility list requirements for acting officers, which will be discussed later. Respondents were allowed to select multiple choices, and most of them did. Results are shown in figure 12.



Figure 12.

External agencies’ requirements for an acting officer to prove competency prior to operating as an acting officer.

External survey respondents were asked if they evaluate the performance of their acting officers. Seventy-six percent of respondents indicated that they did evaluate the performance of their acting officers. Forty percent of respondents stated they evaluated the performance of their acting officers through formal annual performance reviews, forty percent stated they reviewed the performance of their acting officers informally through discussion when necessary. Eighteen

percent of respondents selected not applicable when asked, and one respondent stated they utilize a random annual selection for completion of a scenario based assessment.

The external survey asked if external agencies had any eligibility list considerations or requirements in order to operate as an acting officer. Agencies were asked if placement on an eligibility list is required to be an acting officer, if status as an acting officer was required to be eligible for a promotional exam, or if they had no eligibility list requirements. Fifty percent of respondents do not have eligibility list considerations or requirement to operate as an acting officer. Thirty-two percent of respondents stated that a candidate must be on an eligibility list in order to operate as an acting officer. Three percent stated that status as an acting officer was required in order to be eligible for promotional exam. Two respondents added commentary that when an eligibility list exists, acting officers must be on the list. When the list expires, they revert to seniority as the requirement for acting officer. A follow up question asked respondents if they maintain a constant eligibility list for company officers. Sixty-six percent of respondents do not maintain a constant eligibility list, while thirty-four percent do maintain a constant list.

External agencies were asked if they have a formal training or mentor program to prepare company officers. Forty-five percent of respondents do have a formal training program, forty percent do not, and eleven percent added commentary indicating they are in the process of developing one. A follow up question asked respondents what topics their program covers. Results are shown in figure 13.

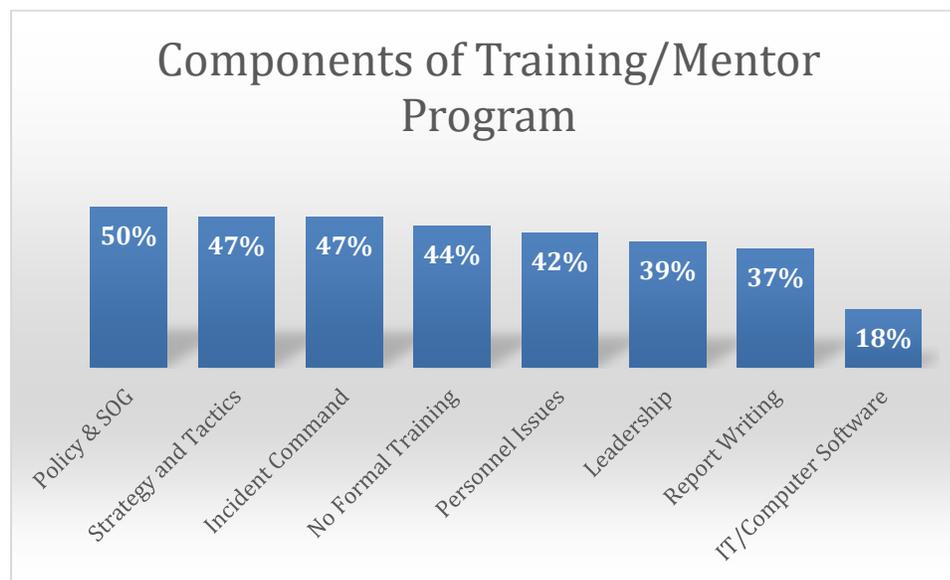


Figure 13.

External agencies indicated the educational components of their training/mentor program for acting officers.

The final three questions on the external survey were open ended, intended to encourage commentary from respondents about their programs. Respondents were asked to describe any other criteria covered in their training program. Responses included;

- *“Blue Card terminology (not complete course), NIMS 300, 400, 700,800*
- *Shadowing with administrative duties and daily duties, apprenticeship and documentation, company drills demonstration, fire prevention demonstration (inspections and pre-plans).”*
- *“We use the IAFC guidelines for our officer requirements.”*
- *“Department SOG that requires minimum training and quarterly continuing education officer training.”*

- *“Knowledge of all our documents of authorities, for example, contracts, policies, city policies, and the chief has the final say if you can be an acting officer.”*
- *“Acting officers go through the same training program our lieutenants go through. The only difference is a promoted lieutenant is required to meet all requirements for the position within their probationary period (one year) and are compensated overtime if they need to go off duty. Acting officers are under no time restriction to obtain the requirements and are not compensated if they need to go off duty.”*
- *“Managing human condition, coaching, ethics, program management.”*

Respondents were then asked what they would improve about the acting officer training program. Responses included;

- *“Formal promotional criteria/certifications (i.e. Fire Officer I, Incident Command System training)”*
- *“Expand the scope of coverage to include administrative and personnel responsibilities”*
- *“More mentoring from experienced officers (never enough) and more hands-on training in managing people for acting officers so they can do it as officers in charge and be more prepared if promoted to lieutenant.”*
- *“Add a mentoring/coaching program”*
- *“More training in fire officer 1 and 2 with strategy and tactics”*
- *“For acting officers, I would like to see a set guideline or always keep a current promotion list”.*

- *“Require specific classes prior to acting in-charge, as well as a practical and/or written test to complete the program prior to acting in-charge.”*
- *“A prerequisite to take the lieutenant's promotional exam is Fire Officer I, for the captain's exam is Fire Officer II. I would drop it to Fire Officer I for acting lieutenant and Fire Officer II for the lieutenant's test. I would also require Blue Card or some other incident management system training before being allowed to act.”*
- *“Formalize the program for better continuity between shifts.”*
- *“Formalization of the training program, maintain a constant eligibility list, acting officers reapply and are assigned based upon that list every two years.”*
- *“Formalize training and mentoring for actors”*
- *“Include all candidates on eligibility list that sat for test. Last time only did top six.”*

The final question on the external survey asked respondents to describe what works well in their training programs. Responses included;

- *“Having an established list for acting officers”*
- *“Quality one on one approach provides good feedback”*
- *“The fact that we have standards. An acting officer must demonstrate basic competency for the position; not just anyone can ride the front seat. Whatever you do, have standards for this position.”*
- *“Pre-requite training, as it prepares the individual promotional opportunities”*
- *“Personal observation of how they perform in an acting capacity”*
- *“Ride up evaluation by the company officer as it is a real time assessment”*

- *“We train everyone for the next promotion before they test, all firefighters are trained to lieutenant minimum, all lieutenant to captain and captains are taking college courses, Ohio Fire Executive, etc.”*
- *“Good coverage when formal officer is absent, greater confidence in members in that AO position, much better skill sets, on and off scene performance and less of a hurdle when an AO is promoted to LT with this program. Good addition to the succession plan and a position of pride for the majority of AO's involved.”*

DISCUSSION

Research has shown there are no defined performance expectations or qualifications for serving as crew leader at BAFD. In an internal survey, 86 percent of firefighters and 100 percent of promoted fire officers agree that BAFD would benefit from a formal method of selecting and preparing crew leaders. When crew leaders were asked if they felt prepared for their role, 53 percent did not agree. The City of Blue Ash Fire Lieutenant job description states that a lieutenant serves as a command officer over fire department personnel; may have charge of a station, squad unit, or other specialized unit; and other appropriate duties as assigned by or through the city manager or his designee. (Blue Ash, 2014.) Because the crew leaders are filling the vacancy of the fire lieutenant, they are placed in position to assume the same responsibility. It's imperative that BAFD is adequately selecting and preparing members for this role.

NFPA 1561, *Standard on Emergency Services Incident Management System and Command Safety*, outlines the responsibility of the organization to adequately prepare and train their supervisors. NFPA 1561 states that “ESO's shall develop and implement a qualification

process specific to their organization to ensure that members who function in the incident management system are qualified to function in incident management positions in the types on incidents that the ESO would be expected to respond to.” (NFPA 2020.) The NFPA also states that “The ESO shall define training and experience requirements.” (NFPA, 2020.) According to the NFPA, the word *shall* indicates a mandatory requirement, whereas the word *should* indicates a recommendation that is not required. (NFPA 2014.) BAFD does not currently provide formal training for crew leaders.

Survey results showed there are currently no established requirements for serving as crew leaders for the BAFD. Each officer holds different criteria to serve as crew leader. Outside of informal observation of daily performance, years of experience was the criteria used the most by officers to select their crew leaders, 88 percent. Interestingly, only 50 percent of firefighters feel that years of experience should be considered when selecting crew leaders. Many crew leaders in the organization have furthered their education in the way of fire officer classes. However, many of these courses were completed after they served as crew leader, or at the sole discretion of the employee.

Without predefined qualifications and a formal training program, selection of crew leaders is subjective in nature. Employees have been told they are not qualified to operate as a crew leader on one shift but when they transfer to another shift, they are qualified. On an internal survey, one officer respondent expounded upon this. *“I felt that most of my development was self-induced. While a promoted officer needs to be motivated, I think the department needs a structured system to better prepare motivated employees. After orientation there is no guidance for any employee. The guidance is up to the employee’s supervisor, which creates bias. I think all employees should be provided with the resources to develop. Right now I think certain people*

pick and choose who they want to develop". BAFD does not provide a roadmap of professional development for their employees. Historically, BAFD has regularly changed the qualifications to test for a promotional exam, likely depending on the quality of the candidate pool. The BAFD must establish consistent qualifications for promotion in order to provide future officers with a road map for development. This will help to establish predefined qualifications and a formal mentor program for crew leaders.

Internal and external surveys proved that there is not one clearly defined solution to prepare and select crew leaders. Every agency must develop a solution that works for them. What became evident from survey results is that clearly defined pre-requisites, hands-on training evolutions and real time mentoring proves successful to most agencies. The IAFC addresses this in the second edition of the *Officer Development Handbook*. The IAFC states that people learn best from experience. They reference Michael Lombardo & Robert Eichinger (2002) who found that what actually works for employee development is 70 percent experience, 20 percent mentoring and only 10 percent education. It is important that BAFD sets their members up for success by implementing required qualifications and a mentor system to prepare their crew leaders for the role. Mentoring can be both formal and informal. As the IAFC states, a formal mentor program established through policy and procedure provides consistent and dependable paths for aspiring leaders (IAFC, 2010). The BAFD has a mentor packet and test out to clear probation, to operate as a paramedic, and to become a qualified fire apparatus operator. There is no such program for crew leader.

Internal surveys asked promoted officers what they wish they were better prepared for prior to promoting, and crew leaders what they wish they were better prepared for. Both groups were very consistent that the following items were lacking; human resources/personnel issues,

incident management/scene size up, understanding external agencies and resources as well as report writing. The consistency in their answers cannot be understated. These are obvious topics that must be addressed in the way of formal training. BAFD firefighters were asked what they would like to see improvement in from their crew leaders. Interestingly, incident management was not rated as a priority from the firefighter perspective. The criteria they saw most the opportunity for improvement was; confidence while making decisions, leadership during training evolutions and IT/technology. It is apparent that firefighters are looking for leadership from their crew leaders. BAFD can improve this through a formal training and a mentorship program.

NFPA 1021, *Standard for Fire Officer Professional Qualifications*, does not address the crew leader or acting officer position. They define a supervisor as “An individual responsible for overseeing the performance or activity of other members” (NFPA, 2014). The crew leader position at BAFD fits this description. The NFPA defines several JPR’s for the supervisory fire officer. These include human resource management; community and government relations; administration; inspection/investigation; emergency service delivery; health and safety (NFPA, 2014). Because the crew leader is not a promoted officer, they do not need to meet all of these expectations, however these JPR’s can be used to create curriculum for a formal training program.

Officer development is important for every ESO. In BAFD, the crew leader is the most infant position of formal leadership in the organization. This is not to underscore the importance of their responsibility. In essence, preparing crew leaders is the same thing as preparing future fire officers. In an internal survey, only 71 percent of current crew leader respondents answered “yes” or “maybe” when asked if they aspire to promote to a fire officer. Ninety-two percent of firefighter respondents answered “yes” or “maybe” when asked if they aspire to be a crew leader,

while seventy-one percent of respondents answered “yes” or “maybe” when asked if they aspire to promote to fire officer. The BAFD must make sure that employees who desire to promote are provided the opportunity to develop their skills while operating as a crew leader.

External surveys indicated that several organizations have eligibility list considerations when selecting their crew leaders. One external respondent stated that in order to act as an officer, the candidate must be ranked in the next three sequential positions on their eligibility list. They have predefined requirements to test for lieutenant. This means that acting officers have the same qualifications as promoted officers. This ESO retests for lieutenant every two years, regardless of open positions. Retesting every two years would provide the opportunity for every candidate to improve their position and avoid complacency. A separate ESO stated that acting officers must have passed one of the previous two promotional exams for lieutenant. This means that acting officers have the same qualifications as promoted officers. This agency does provide pay incentive for acting officers.

Another external agency also stated they require acting officers to have passed the agencies’ previous promotional exam. They stated that an established list of acting officers is effective in their agency, but that having consistent formal promotional criteria or certifications would improve their agency. They do not have a formal mentor program but do provide their acting officers with pay incentive.

A career agency near BAFD with a similar size and run volume also requires placement on an eligibility list to be an acting officer. They also have extensive prerequisite qualifications to test for lieutenant which means all acting officers are equally as qualified as the promoted officers. This agency does provide pay incentive and has a formal mentor

program. They stated that their mentor or ride up program works well for their organization because it provides a real time assessment by the promoted officer.

The research indicates BAFD would benefit from a more formal method of selecting, training and mentoring crew leaders. BAFD can develop curriculum that works well for the organization. Crew leaders are a very important part of the operation, often the future leaders of the organization. It's imperative that BAFD sets them up for success. Seventy-five percent of the administrative officers are eligible or must retire within five years. When considering backfilling these promotions, the importance is evident; adequately preparing crew leaders will provide better leadership, safer crews and more efficient services rendered. The skills and leadership that crew leaders gain will translate into a smooth transition to company officer. The same lessons must be applied to lieutenants who ride out of class as shift commanders.

RECOMMENDATIONS

Based off of research, the following recommendations are offered to the BAFD:

1. Establish predefined qualifications for the role of crew leaders. These qualifications should be determined by leadership within the BAFD. Qualifications should be clearly communicated and consistent. Examples may include, but are not limited to:
 - Three years of full time employment within BAFD
 - Most recent personnel review rating no less than "meets expectations"
 - Class one fire apparatus operator
 - Paramedic
2. The BAFD training committee, along with the leadership of the organization, should develop curriculum to present to crew leader candidates. The organization must

develop curriculum that is effective for the them. *The IAFC Officer Development Handbook* will aid in the development of the curriculum. NFPA 1021, *Standard for Fire Officer Professional Qualifications* should also be utilized. Lessons must include; but not necessarily be limited to the following general topics:

- Scene size up and incident management
- External agencies and resources
- Report writing
- Human resources/personnel issues

Although the crew leader is not responsible for discipline, they should learn about conflict management and how to communicate with the people under their care.

3. The BAFD training committee, along with the leadership of the organization, should develop a mentor packet for crew leader candidates. The mentor packet should include a number of topics to go over with their company officer. This packet should include the opportunity for a crew leader candidate to ride in the front seat while their lieutenant is in the back, providing real time assessment and feedback during actual incidents. At the completion of this packet, the crew leader candidate should complete a test out with their shift captain to demonstrate competency to act as crew leader. Active crew leaders should be provided repetitions during hands on training evolutions in the crew leader role, in the presence of a promoted company officer.
4. Crew leaders should be formally reviewed as part of their annual performance evaluation. This provides a standard and consistent manner to provide crew leaders with regular feedback on their performance and opportunities for improvement.

5. BAFD should assess the feasibility of considering eligibility list requirements in order to serve as crew leader. This practice would ensure that employees whom desire to promote are provided the opportunity to develop their skills. This could be accomplished in a number of ways, including but not limited to:
 - Crew leader is required to be placed on previous eligibility list
 - Status as crew leader could be required in order to test for promotion
 - Crew leaders must sign letter of intent to take next promotional exam
6. BAFD should establish consistent qualifications in order to test for promotion. This will provide all employees with guidance on their professional development plan.

There has been much research conducted on fire officer development, but much less has been conducted on the acting officer, or crew leader. The researcher offers the following recommendations to future readers who may choose to conduct similar research.

1. Research external agencies' requirements to serve as an acting officer as compared to their requirements to promote to company officer. This research paper addressed the qualifications to serve as acting officer, however comparison with the requirements to promote could provide relatable data.
2. If assessing the program from different ranks of the organization, ensure all survey question selections are the same in wording and nature. When compared against each rank, this will provide a more direct assessment.

REFERENCES

- United States, City of Blue Ash. (n.d.) 2018 Annual Report. Retrieved July 6, 2020, from [https://cms4.revize.com/revize/blueashnew/2018 Annual Report.pdf](https://cms4.revize.com/revize/blueashnew/2018%20Annual%20Report.pdf)
- International Association of Fire Chiefs (2010). Officer development handbook. Second edition, 2010. IAFC Foundation. USA.
- Ward, Michael J. (2015) Fire officer principles and practices. Enhanced third edition. USA. Jones & Bartlett Learning
- National Fire Protection Association (2014). Standard for fire officer professional qualifications (NFPA 1021). Quincy, MA
- National Fire Protection Association (2020). Standard on emergency services incident management system and command safety (NFPA 1561). Quincy, MA
- The National Institute for Occupational Safety & Health. (2016) Career fire apparatus operator dies after falling down an unsecured elevator shaft at a 5-story residential structure (f-2015-06)
- Blue Ash Fire Department. (2020). Blue Ash Fire Policy Manual. EMS Response. Section 506.5, Disregards
- City of Blue Ash. (2014). Firefighter III. Blue Ash: City of Blue Ash, OH.
- City of Blue Ash. (2014). Fire Lieutenant. Blue Ash: City of Blue Ash, OH.
- City of Blue Ash. (2019). Fire Captain. Blue Ash: City of Blue Ash, OH.
- National Volunteer Fire Council. (2014). Understanding and implementing standards NFPA 1407 and 1021. Volume 2. Retrieved from https://www.nfpa.org/Assets/files/AboutTheCodes/1021/Standards%20Guide_1021_1407.pdf

NFPA. (2020). Retrieved 14 February 2020, from <https://www.nfpa.org/>

Wisko, M. (2011, July 01). Creating an Officer Development Program. Retrieved July 1, 2020, from <https://www.fireengineering.com/2011/07/01/233927/creating-an-officer-development-program/>

U.S. Census Bureau (2019). Retrieved from

<https://www.census.gov/quickfacts/fact/table/blueashcityohio/PST045219>

Hunt, C. (2014). Creating a Comprehensive Acting Company Officer Program. National Fire Academy: Executive Fire Officer.

Haller, C. (2013). Preparing Firefighters for the Assignment of Acting Officer. Ohio Fire Chief's Association. Ohio Fire Executive Program.

APPENDIX 1 – INTERNAL FIREFIGHTER SURVEY

BAFD Internal Firefighter Survey

Thank you for your time. Your input is crucial to my research. Please answer as honestly and thoroughly as you can. All responses are confidential and no names are associated with any survey.

* Required

Do you agree with the following statement? I am comfortable with my crew leaders making decisions and assignments that affect my safety and well being on an emergency scene. *

- Strongly Agree
- Somewhat Agree
- Neutral
- Somewhat Disagree
- Strongly Disagree
- Other:

Do you agree with the following statement? I am comfortable with my crew leaders making decisions and assignments that affect my safety and well being at the fire station. *

- Strongly Agree
- Somewhat Agree
- Neutral
- Somewhat Disagree
- Strongly Disagree
- Other:

Please list three areas of strength from your current crew leaders. *

- Maintaining composure on emergency scenes
- Confidence while making decisions
- Familiar with incident management
- Familiar with city geography and target hazards
- Familiar with department fire and EMS equipment
- Familiar with IT and technology
- Knowledge of policy and SOG
- Keeps crew on task of daily assignments and duties
- Communicates well with crew
- Communicates well with public and outside agencies
- Leadership during training evolutions
- Other:

Please list three opportunities for improvement from your current crew leaders. *

- Maintaining composure on emergency scenes
- Confidence while making decisions
- Familiar with incident management
- Familiar with city geography and target hazards
- Familiar with department fire and EMS equipment
- Familiar with IT and technology
- Knowledge of policy and SOG
- Keeping crew on task of daily assignments and duties
- Communication with crew
- Communication with public and outside agencies
- Leadership during training evolutions
- Other:

Would the BAFD benefit from a formal process for selecting members to operate as crew leaders? *

- Yes
- No
- Maybe
- Other:

If yes, what should be considered? Please check all that apply. *

- N/A
- Years of BAFD service
- Years of experience (outside of BAFD)
- Written test
- Practical test or assessment center
- Oral board or interview
- Orientation packet or coaching sheets
- Other:

Would the BAFD benefit from establishing training requirements for crew leaders? *

- Yes
- No
- Maybe
- Other:

Do you aspire to be a fire officer? *

- Yes
- No
- Maybe
- Other:

Please provide any additional information that would feel would improve the current crew leader program at BAFD. *

Your answer

If yes, what training should be required? Please check all that apply. *

- N/A
- Blue Card Incident Command
- Fire Officer 1
- Fire Officer 2
- NIMS IS-200.C Basic Incident Command System of Initial Response
- NIMS ICS-300 Intermediate Incident Command System
- Fire Instructor
- EMS Instructor
- Incident Safety Officer
- Paramedic
- Other:

Do you aspire to be a crew leader? *

- Yes
- No
- Maybe
- Other:

APPENDIX 2 – INTERNAL CREW LEADER SURVEY

BAFD Crew Leader Internal Survey

Thank you for your time. Your input is crucial to my research. Please answer as honestly and thoroughly as you can. All responses are confidential and no names are associated with any survey.

* Required

How many years of experience do you have at BAFD? This includes both full and part time. *

- 0-2
- 3-5
- 6-10
- 11-15
- 16 or more

How many years of experience do you have at BAFD operating as a crew leader? *

- 0-2
- 3-5
- 6-10
- 11-15
- 16 or more

Do you know what is expected of you when operating as a crew leader? *

- Yes
- No
- Somewhat
- Other:

If you answered "no" or "somewhat", please explain. *

Your answer

Which training topics have you attended or are currently attending? Please select all that apply. *

- Fire Officer 1
- Fire Officer 2
- Blue Card Incident Command
- Fire Instructor
- EMS Instructor
- Leadership Seminars
- Strategy & Tactics Classes
- Advanced EMS Classes
- Human Resources
- NIMS IS-200.C Basic Incident Command System of Initial Response
- ICS-300 Intermediate Incident Command System
- Incident Safety Officer
- Other:

Have you attended formal crew leader training presented by BAFD? *

- Yes
- No
- Other:

If so, when?

Your answer

Do you agree with the following statement? I have been adequately prepared for my role as crew leader. *

- Strongly Agree
- Somewhat Agree
- Neutral
- Somewhat Disagree
- Strongly Disagree
- Other:

In what areas could BAFD better prepare you for the role of crew leader? Please check all that apply. *

- Human resources/personnel management
- Report writing
- Incident management
- Scene size up
- Understanding external agencies and resources
- Daily tasks and assignments at the fire station
- Other:

Do you agree with the following statement? When operating as a crew leader, I am comfortable making decisions and assignments that affect the safety and well being of personnel I am responsible for on emergency scenes. *

- Strongly Agree
- Somewhat Agree
- Neutral
- Somewhat Disagree
- Strongly Disagree
- Other:

Do you agree with the following statement? When operating as a crew leader, I am comfortable making decisions and assignments that affect the safety and well being of personnel I am responsible for at the fire station. *

- Strongly Agree
- Somewhat Agree
- Neutral
- Somewhat Disagree
- Strongly Disagree
- Other:

Do you agree with the following statement? When operating as a crew leader, I am comfortable completing all daily and assigned tasks and station responsibilities. *

- Strongly Agree
- Somewhat Agree
- Neutral
- Somewhat Disagree
- Strongly Disagree
- Other:

Please rate your working knowledge of BAFD policies and SOG's. *

- | | | | | | | |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|
| | 1 | 2 | 3 | 4 | 5 | |
| Needs Improvement | <input type="radio"/> | Excellent |

The following areas of responsibility are important for a crew leader *

	Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree
Scene Size Up / Initial Radio Report	<input type="checkbox"/>				
Initial Arriving Incident Command	<input type="checkbox"/>				
Human Resource / Personnel Relations	<input type="checkbox"/>				
Policy/SOG Knowledge	<input type="checkbox"/>				
Report Writing	<input type="checkbox"/>				
Daily Business of Fire Department	<input type="checkbox"/>				

Do you have aspirations of promoting to a fire officer? *

- Yes
- No
- Maybe
- Other:

APPENDIX 3 – INTERNAL OFFICER SURVEY

BAFD Internal Officer Survey

Thank you for your time. Your input is crucial to my research. Please answer as honestly and thoroughly as you can. All responses are completely confidential.

* Required

How many years of experience do you have at BAFD? This includes both full and part-time. *

- 0-2
- 3-5
- 6-10
- 11-15
- 16 or more

How many years of experience do you have at BAFD as a fire officer? *

- 0-2
- 3-5
- 6-10
- 11-15
- 16 or more

Do you agree with the following statement? In my absence, I am comfortable with my crew leaders making decisions and assignments that affect the safety and well being of personnel they are responsible for on emergency scenes. *

- Strongly Agree
- Somewhat Agree
- Neutral
- Somewhat Disagree
- Strongly Disagree
- Other:

Do you agree with the following statement? In my absence, I am comfortable with my crew leaders completing all daily and assigned tasks and station responsibilities. *

- Strongly Agree
- Somewhat Agree
- Neutral
- Somewhat Disagree
- Strongly Disagree
- Other:

Do you agree with the following statement? In my absence, I am comfortable with my crew leaders knowledge and understanding of department policy and SOG's *

- Strongly Agree
- Somewhat Agree
- Neutral
- Somewhat Disagree
- Strongly Disagree
- Other:

What criteria did you use to determine the personnel on your shift who are selected to operate as crew leaders? Please select all that apply. *

- Years of experience
- Annual personnel review rating
- Informal observation of daily performance
- Fire officer classes
- Blue Card Incident Command
- Fire instructor
- EMS instructor
- Leadership seminars/Officer development courses
- Strategy and tactics classes
- Advanced EMS classes
- Human resource knowledge
- Other:

Do you evaluate the performance of your crew leaders? *

- Yes
- No
- Other:

If yes, how? *

- Formally, on annual performance evaluation
- Informally, through discussion when necessary
- N/A
- Other:

Do you believe your crew leaders know what is expected of them when operating as a crew leader? *

- Yes
- No
- Somewhat
- Other:

Do you believe crew leaders should be held to the same standard as promoted company officers? *

- Yes
- No
- Maybe
- Other:

Please explain your thoughts to the previous question. *

Your answer

Would the BAFD benefit from a formal process for selecting members to operate as crew leaders? *

- Yes
- No
- Maybe

If yes, what should be considered? Please check all that apply. *

- N/A
- Years of BAFD experience
- Years of experience (outside of BAFD)
- Written test
- Practical test or assessment center
- Oral board or interview
- Orientation packet or coaching sheets
- Other:

Would the BAFD benefit from establishing training requirements for crew leaders? *

- Yes
- No
- Maybe
- Other:

If yes, what training should be required? Please check all that apply. *

- N/A
- Blue Card Incident Command
- Fire Officer 1
- Fire Officer 2
- NIMS IS-200.C Basic Incident Command System of Initial Response
- NIMS ICS-300 Intermediate Incident Command System
- Fire Instructor
- EMS Instructor
- Incident Safety Officer
- Paramedic
- Other:

What do you wish you were better prepared for, prior to promoting? Please check all that apply. *

- Human Resources/personnel management
- Report writing
- Strategy and tactics
- Incident management
- Scene size up
- Understanding external agencies and resources
- Daily tasks and assignments at the fire station
- Other:

APPENDIX 4 – EXTERNAL AGENCY SURVEY

OFE External Survey

My name is Justin Burress and I am currently a student in the Ohio Fire Executive Program. I am researching the best methods to select, train and prepare acting company officers. Your input is vital to my research and I would greatly appreciate if you are able to complete this survey. Thank you for time and assistance.

* Required

Email address *

Your email

Is your department *

- Career
- Part time
- Combination
- Other:

How many uniformed personnel make up your department? *

Your answer

What is your annual combined fire and EMS run volume? *

Your answer

Does your department assign a promoted company officer (i.e, lieutenant or captain) to the officer seat of the fire apparatus? *

- Yes
- No
- Other:

In the absence of a promoted company officer, does your department utilize an "acting company officer"? *

- Yes
- No
- N/A
- Other:

If so, does this member receive a pay incentive? *

- Yes
- No
- N/A
- Other:

Do you have set criteria to select the "acting company officer"? *

- Yes
- No
- Other:

How many years of service do you require a member to have prior to acting as company officer? *

- No experience requirement
- 1-2 years
- 3-5 years
- 6-10 years
- 11 or more years
- Other:

What type of training do you require prior to acting as a company officer? Please select all that apply. *

- No training requirements
- Fire Officer 1
- Fire Officer 2
- Blue Card Incident Command
- Incident Safety Officer
- NIMS IS-200.C Basic Incident Command System of Initial Response
- NIMS ICS-300 Intermediate Incident Command System
- Fire Instructor
- EMS Instructor
- Paramedic
- Other:

How do you require an "acting company officer" candidate to prove competency prior to operating as an acting company officer? *

- We do not require candidates to prove competency
- Informal observation from promoted officers
- Written test
- Practical test
- Coaching sheets or mentor packet
- Other:

Do you evaluate your acting company officers on their performance? *

- Yes
- No
- We do not utilize acting company officers
- Other:

If yes, how? *

- Formally, on annual performance review
- Informally, through discussion when necessary
- N/A
- Other:

Do you require placement on an promotional eligibility list as a prerequisite for acting as a company officer? *

- Placement on eligibility list is required to be an acting officer
- Status as acting officer is required to be eligible for promotional exam
- No eligibility list considerations for acting officers
- Other:

Do you maintain a constant eligibility list for company officers? *

- Yes
- No
- Other:

Do you have a formal training or mentor program to prepare acting company officers? *

- Yes
- No
- Other:

If so, what topics does this program cover? Please select all that apply. *

- Strategy and Tactics
- Incident Command
- Policy and SOG
- Report Writing
- Leadership
- Personnel Issues
- IT/Computer Software
- No formal training or mentor program
- Other:

Please describe any other criteria covered in your training program.

Your answer

What would you improve about your training program?

Your answer

What works well in your training program?

Your answer