

Running Head: WHO IS MANAGING THE INCIDENT? A LOOK AT INCIDENT
MANAGEMENT TEAM DEVELOPMENT FOR THE DOTHAN FIRE DEPARTMENT

Who is managing the incident? A look at Incident Management

Team development for the Dothan Fire Department

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Certification Statement

I hereby certify that this paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used language, ideas, expressions, or writings of another.

Signed: _____

Abstract

This applied research project examined the need for developing a local incident management team (IMT) for the City of Dothan, Alabama and the surrounding communities. The problem is that the Dothan Fire Department (DFD) and Houston County do not have a program for developing IMT members that can be used to manage large scale incidents and bridge a gap before mutual aid resources can arrive. The purpose of this research is to make a recommendation to the Dothan Fire Chief on developing a local IMT that would be available for City and County emergency operations that are large in nature, including approximate costs for development and training.

Action research methods were used to develop the recommendation and to answer the following questions:

1. What level of experience and amount of knowledge, skills and ability should an IMT member possess?
2. What has the DFD done in the past to manage large scale incidents?
3. When should an IMT be utilized?
4. How will an IMT be utilized within the DFD and areas within the region?
5. What amount of funding will it take to develop an IMT?

The literature review provided an overlook of federal guidelines and national consensus standards for team member development, an overview of what other fire departments had used for development and use of the IMT in their jurisdiction. Two surveys—external and internal—were developed to identify the necessary experience needed to be a member of a team and how the IMT should be used to manage large-scale incidents and/or events. Interviews were conducted with various chief officers to review the history of development of incident command

within DFD and what the State of Alabama had used for its regional Type 3 IMT development and training. This included costs associated with introductory and maintenance training.

Recommendations based upon the research concluded that the DFD had already developed a strong foundation in the use of incident command, but there is not a formalized training plan to develop and maintain skills for members.

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INTRODUCTION

Throughout the history of America's fire service there have been emergency incidents that have required vast amounts of resources. Managing these resources to insure the effective and efficient use of resources, maintaining accountability, and providing for the safety of firefighters can be a daunting task for a single incident manager. Firefighting is taught and performed as a team skill. So why shouldn't DFD utilize the team approach to incident management as we do with emergency medical services and structural firefighting? Not only could an Incident Management Team (IMT) be a large asset to the Dothan Fire Department (DFD), but it could also serve as a resource for Houston and surrounding counties.

The problem is that the Dothan Fire Department (DFD) and Houston County do not have a program for developing IMT members that can be used to manage large scale incidents and bridge a gap before mutual aid resources can arrive. The Alabama Mutual Aid System (AMAS) has a trained Type 3 IMT, but it would take hours for the team to arrive. The purpose of this research is to make a recommendation to the DFD Fire Chief on developing a local IMT that would be available for City and County emergency operations that are large in nature, including approximate costs for development and training. We continue to have firefighters killed in the line of duty every year. A factor that is continuously identified in after action reports is attributed to command and control. This applied research project is being developed to meet one of the five United States Fire Administration's (USFA) operational guidelines to reduce the loss of life from fire of firefighters.

Utilizing an action-method research process the following questions will be answered: a) What level of experience and amount of knowledge, skills and ability should an IMT member possess?; b) What has the DFD done in the past to manage large scale incidents?; c) When should an IMT be utilized?; d) How will an IMT be utilized within the DFD and areas within the region?; and e) What amount of funding will it take to develop an IMT?

BACKGROUND AND SIGNIFICANCE

Dothan, Alabama is located in the southeastern corner of the state. The DFD is a full-time career fire department with 169 certified firefighters and a total of 172 employees. The DFD has eight advanced life support (ALS) engine companies housed in eight stations throughout the City of Dothan. There are two ladder truck companies, a technical rescue unit, and a hazardous materials unit. Along with the eight active fire stations, there are two reserve stations and one administrative office building. The Training Division's classroom and drill field are attached to Station 3, Westgate, located on the west side of the city. Each station houses one engine company; stations 1 & 3 house the truck companies, while the other stations house different types of units (i.e. technical rescue unit, hazmat unit, brush truck, etc). The Administrative Building has the offices of the Fire Chief, Fire Marshal Division (one Battalion Chief, three Captains, and one Public Education firefighter), Administrative Assistant, Accounting Clerk, Secretary, all Operational Battalion Chiefs' offices, the Training & Safety Battalion Chief, Emergency Medical Services (EMS) Captain, Special Operations Captain, and the City of Dothan's Department Operation Center (DOC).

The City is divided into two battalions. Battalion 1 is housed at Station 1, located beside to Fire Administration, and Battalion 2 is located at Station 3. The reserve stations include the

old Central Fire Station and Southside Fire Station. These stations house reserve apparatus and equipment utilized by the Special Operations Teams.

The Training & Safety Division consists of one battalion chief, three captains and one sergeant. The training division oversees the certification courses, maintains the training facility (drill field and classrooms), and facilitates different areas of training: fire suppression, emergency medical services, technical rescue and hazardous materials.

The Fire Marshal Division is responsible for fire code enforcement, commercial plans review, fire inspections, and public education. This division of the department works closely with several different entities within the City of Dothan and County government, ensuring all ordinances, rules, and regulations are followed.

The City of Dothan sits at a key crossroad between Alabama, Florida, and Georgia. Known as the Hub of the Wiregrass Region, Dothan has a population of approximately 62,000, which swells to over 120,000 (M. Parker, personal communication July 8, 2008) during the business day and covers a total area of 87 square miles. Dothan is a large evacuation center for the Gulf of Mexico Region during hurricane season and is a channeling point to the areas north, east and west of the Florida Panhandle when hurricanes are predicted to make landfall within the Gulf Region. Highway 431 north can channel vehicular traffic to the north towards the Alabama/Georgia border. Highway 231 north will channel traffic to central Alabama connecting with two interstates: I-65 and I-85 in the state capital of Montgomery. Highway 84 runs east and west moving traffic between Mississippi, Alabama, and Georgia. Not only do these highways take traffic to the north during evacuations, they also bring traffic through Dothan to the beaches. During the Spring Break season, a fire engine can travel from the south side of the city, station 4, to the east side of the city, station 5, on the Ross Clark Circle (Highway 231 &

431) and not see an Alabama License plate! Dothan is a large transportation hub for the beaches of Florida during the summer vacation season as well.

Fort Rucker, Alabama, is the home of Army Aviation and is located approximately 20 miles to the west of the city limits. Several key active duty Air Force bases are within a two hour drive to the north, southwest, and to the south of Dothan: Maxwell AFB, Alabama, Eglin AFB, Florida; Hurlburt Field, Florida; and Tyndall AFB, Florida. There are several National Guard armories and Reserve Centers found within a 30-mile radius. The Farley Nuclear Plant is located 20 miles to the east of Dothan.

Portions of the City of Dothan sit in Dale, Henry and Houston counties, with the border of Geneva County touching the city limits also. Coffee County sits on the western boarder of Dale County and is approximately 20 miles away from Dothan. There is a large diversity of governmental entities within a 25 mile radius of the City-state, county, and municipality. According to the Fire Departments Net website, these four counties consist of 37 fire departments, five of these being career departments (Fire Departments Net, 2008). The career departments include: Fort Rucker (Dale), Ozark (Dale), Enterprise (Coffee), Dothan Regional Airport (Dale), and Dothan (Houston). Houston County is the home to 14 volunteer fire departments.

The DFD is prone to large scale incidents, whether the incident happens within the city limits or through mutual aid to neighboring locations. Examples of recent large scale incidents include:

Taragon Hills Apartment Complex Fire August 2008

Enterprise, AL High School Tornado March 2007

Hurricane Katrina September 2005

Hurricane Ivan September 2004

Anhydrous Ammonia Leak at a local fertilizer plant April 2000

Dothan has its share of emergency incidents but there are also events that have an impact on operations. The National Peanut Festival and Parade is an annual event that brings thousands of people to Dothan in November.

To assist with managing multiple and/or large scale incidents, DFD utilizes a Department Operation Center (DOC). The DOC is also recognized as the City of Dothan Emergency Operations Facility which allows city department heads and elected officials to gather at to manage city-wide emergencies.

The purpose of this research is to develop and draft a recommendation for the Fire Chief for creating an Incident Management Team (IMT) for the department and surrounding communities to utilize at large-scale emergency incidents and events. The research is directly tied to the National Fire Academy course, *Executive Analysis of Fire Service Operations in Emergency Management*. During the course, students are exposed to several case studies and simulations where they perform in assigned roles as part of an IMT. Through the simulations, students assigned to different command and general staff positions must develop and analyze their management skills to respond to large-scale incidents. The concept of working as a “team” in successfully managing large scale events became obvious during the course. In developing an IMT, it is believed by the author that a safer response environment for large and complex incidents will be created for DFD firefighters. This is inline with the the USFA’s operational objective of reducing the loss of firefighters. Throughout the course, it was stressed by the instructors the need for a strong incident command and control.

LITERATURE REVIEW

Standards and history

A literature review was conducted to identify the necessary information needed to identify the necessary knowledge, skills, abilities, experience, and training required for developing a successful IMT member. Recommendations on when to implement an IMT and how it should be utilized were also reviewed. The first area approached in the literature review was the national consensus standards provided by the National Fire Protection Association (NFPA). These standards and recommended practices are developed through a consensus process that is approved by the American National Standards Institute (NFPA 1, 2005). In NFPA 1561, *Standard on Emergency Services Incident Management System* defines an IMT as “... an incident commander and appropriate command and general staff personnel assigned to the team,” and the authority having jurisdiction (AHJ) will develop qualifications for each position in the command and general staff (NFPA 1, 2005). Chapter nine of the standard goes specifically into the elements of an IMT. The chapter mentions that resources can be critical for smaller jurisdictions and training with surrounding jurisdictions can assist the development of the team (NFPA 1, 2005).

Appendix A defines a large-scale incident as one that covers a large geographical area or is very complex. Appendix E also describes the Incident Command Team concept utilized by the Phoenix Fire Department (PFD). The PFD utilizes a three-person group that consists of the incident commander, support officer, and senior advisor. Each of the positions have specific responsibilities to increase command effectiveness and responder safety (NFPA 1, 2005).

NFPA 1600, *Standard on Disaster/Emergency Management and Business Continuity Programs* paragraph 5.9, states entities “shall develop an incident management system to direct, control, and coordinate response and recovery operations” (NFPA 2, 2007). Entities should also establish policies and procedures for response coordination, continuity, and recovery actions.

Appendix A of the standard identifies the National Incident Management System (NIMS) as an approved incident management system (IMS). Further an IMS is designed to enable an efficient and effective management of the incident and/or event (NFPA 2, 2007). Appendix E identifies training courses and resources for the United States and Canada. The US resources include: National Emergency Training Center in Emmitsburg, Maryland; National Interagency Fire Coordination Center in Boise, Idaho; and state fire academies and schools (NFPA 2, 2007).

Chapter 11 in the International Fire Service Training Association’s (IFSTA) *Emergency Management Handbook* discusses the history of incident management in the United States. In 1970 there were a number of costly wildland fires in California, and the organizations and fire departments involved wanted to improve interagency coordination. A research project headed up by Harvey Ryland identified that communication was a major problem in coordinating large-scale events. Common radio channels, common terminology, organizational structure, and position descriptions were “critical factors to efficient coordination” (IFSTA, 2007).

In 1972, the Field Incident Management System was combined with Firefighting Resources of Southern California Organized for Potential Emergencies (FIRESCOPE). This merger led to the Incident Command System (ICS). After this system was completed, two major wildland exercises were held with the ICS was utilized by agencies and departments who did not have a common incident management system. IFSTA stresses that in a span of two years

and with the support of top agency management, large scale changes can be accomplished (IFSTA, 2007).

Also in the 1970's, the Phoenix Fire Department developed the Fireground Command model. Fireground Command was geared towards fire departments managing the type of incidents a fire department responds to. In 1989, the National Fire Service Incident Management System Consortium merged FIRESCOPE and Fireground Command into the Incident Management System (IMS). The consortium, which includes the NFPA, IFSTA, the Emergency Management Institute (EMI), FIRESCOPE, and Fireground Command, produced Model Procedural Guides published by Fire Protection Publications at Oklahoma State University (IFSTA, 2007).

The All-Hazards IMT Technical Assistance Program Team Manual produced by the United States Fire Administration (USFA) provides technical assistance in planning for IMT development. All-Hazards Incident Management Teams (AHIMT) are being developed across the United States at all levels of government—state, regional, tribal, and local. The USFA has developed a training program to train responders for the different roles and responsibilities of an IMT. An AHIMT can either support an existing ICS structure or can assume command if delegated or requested to do so (FEMA, 2007). In order for a team to have success, there should be a careful process of planning, selection, training, and funding of the team.

The technical manual briefly describes the make-up of an IMT, which includes Command and General Staff members of an ICS organization. The IMT is dispatched when an agency needs assistance or can no longer manage the incident with the resources available.

There are different levels of IMTs:

Type 4 (Local)—single and/or multiagency team for expanded incidents

Type 3 (All-Hazards)—state or regional multi-agency/multi-jurisdictional team for extended operations

Type 2—National or State team for incidents of regional significance

Type 1—National or State team for incidents of national significance

A local incident management team is one that is formed by a town, city, or county level and used to manage expanded events (FEMA, 2007). Further, a local incident is defined as being handled by local resources and is normally limited to one operational period in the control phase. These type of events include a major structure fire, multi-vehicle collision with multiple victims, a planned event, or hazmat incident (pg 11). Local resources can be from several different agencies and responders generally range from 11 to less than 100.

The manual, on pages 14-15 includes steps in developing an AHIMT which includes developing policies, levels of training, incident situation analysis, and management. On pages 22-23 there is an outline of curriculum for a six-day team-specific training course followed by field training with experienced Type 1 & 2 IMT's (2007).

On the USFA's website, Incident Management Team Development, there is a breakdown of professional development for each level. All levels need to complete the NIMS curriculum (100, 200,300, 400, 700, and 800). For local Type 4 IMTs, the six-day course—*Command and General Staff Functions for Local IMTs (O337)* is recommended. Type 3 teams have more training requirements, which include the courses listed above and the six-day course—*All Hazard IMT (O305)*, field monitoring, and ICS position-specific professional development. For the Type 2 & 1 teams, all courses listed above and a performance-based training regimen as identified by the National Wildfire Coordinating Group (NWCG) in PMS 310-1 *Wildland Fire*

Qualification Guide (USFA 2, 2008). The website also includes specific professional development courses for 13 position specific courses (USFA 2, 2008).

On an adjoining website, there is a timeline for each level of IMT and their interaction at an incident. A local IMT would be utilized from the time the incident begins until the incident is mitigated or expands into a larger incident requiring a Type 3 IMT. Arrival could take up to approximately eight hours. The Type 3 IMT can expand several operational periods and can either manage the incident in its entirety or assist a transition to the arrival of a type 2 or 1 team based on the incident (USFA 1, 2008). The overview page is reflective of the Technical Assistance Program Team Manual.

In a whitepaper written for All Hands Net, Zuber believes local IMTs, specifically Type 3 teams, bring advantages to the incident response. Local teams can respond faster, bring their known local contact with them, and, through training, build relationships that will prove beneficial to building trust and confidence (Zuber, 2008). He stresses that due to the training provided to team members, the agency and community they assist will reap large benefits when it comes to information sharing, transitioning back to normal operations, and documenting the event (Zuber, 2008).

Santa Maria (2008) discusses the use of Incident Management Teams in the Sanford Health headquartered in Sioux Falls, SD. They realized through experience that their smaller facilities could easily be overwhelmed with sufficient resources to help manage incidents. They devised a checklist for activation, a deployable team of incident managers that respond from an unaffected facility to the affected facility, and learned from the growing pains of developing a new response concept. Santa Maria also compares the IMT to the coaching staff of a baseball team (Santa Maria, 2008).

Guidelines, Procedures, and Policies

A review of various guidelines, procedures, and policies from various departments across the country was also performed. The Chesterfield Fire & EMS provided two documents. The first procedure identified the basic team make up of three teams, each position in each team, and the activation process. Authority for activation is delegated to the on-scene incident commanders and the level of activation: initial, select positions, or the entire team (Sacra 1, 2007).

The next procedure evaluated from Chesterfield was FIREDOC. This procedure outlines the steps for the IMT to perform when staffing the Fire Department Operations Center. Included in this document were the training requirements for fire department members who may fill the FIREDOC positions. (Sacra 2, 2007).

The Fresno Fire Department's California Incident Command Certification System (CICCS) policy identifies minimum training, experience and fitness levels for each position. Originally designed for wildland incidents, it has been adapted to all-risk incidents. Position qualifications follow the NWCG 310-1 with prerequisites. Members must maintain a position task book which are used to evaluate the team member in their performance or for re-certification. The policy also lists the individual positions and the fitness, training, and experience levels required (Fresno Fire Department, n.d.).

The San Diego Fire-Rescue Type III Incident Management Team guide provided the direction a candidate needs in order to complete the training process to become a member of the IMT. This was the first document that was a standard, policy or procedure that was promulgated by a City council. (San Diego Fire-Rescue, 2005). The training and experience requirements are

similar to the others reviewed: NIMS core courses, position specific, and shadowing with a federal type-1 or -2 team at an incident. The guide also identifies the mobilization process (San Diego Fire-Rescue, 2005).

Miller discusses the need for command level training for fire chiefs and executive staff members in participating in incident management. He discusses two case studies of incidents that were utilized prior to NIMS being enacted—1989 Loma Prieta earthquake and the 1994 Northridge earthquake (Miller, 1999). Miller goes on to discuss that the NWCG qualification guide (310-1) was used to prepare and train members in specific positions.

Seattle Metro and the State of Wisconsin have created guidelines for selection of team members, an application process, and training requirements. For Wisconsin, the local jurisdiction provides the selection process for the team (Wisconsin, 2008). With Metro-Seattle, the Incident Commanders are chosen by an oversight board consisting of members from the involved jurisdictions. Members in other positions are chosen by the team certification committee (Seattle Metro Incident Management Team Committee, 2006).

In a report written by Donahue et al, a national learning conference was held in DeKalb, Illinois on all-hazards incident management team training and education. The conference brought over one hundred AHIMT managers, members and training coordinators from thirty states and Puerto Rico. They were brought together to discuss concerns and priorities on IMT development, sustaining the team and future team needs (Donahue, Harker, Graves, & Wilford, 2009). The report from this conference identified four critical issues that faced the development of AHIMT's: standards, connections and tools, funding, and training. The report also identified ten recommendations, the present state of the recommendation, and recommended additional work for issues that affect the AHIMT program. These recommendations came from a panel of

people most directly involved with AHIMT programs (Donahue, Harker, Graves, & Wilford, 2009).

In a study for the IBM Center for The Business of Government by Moynihan, he describes the ICS as a hierarchical network that was developed in California in 1970. Crisis, states Moynihan, creates an organizational paradox where the network of responders needs to come together to coordinate resources, utilize rapid decision making, and coordinated action. ICS utilizes both networks and hierarchies which meet the needs of the incident (Moynihan, 2007).

Moynihan uses four case studies in his study and identifies key lessons learned from: Wildland-Urban fires, Oklahoma City bombing, 9/11 attack on the Pentagon, and Hurricane Katrina. The lessons learned were generally stated from each type of disaster, from the Command and Control aspect, network capacity, building relationships and trust among organizations, and recommendations for the future (Moynihan, 2007). Many of the lessons learned focused on training prior to the disaster, building relationships prior to the disaster and adapting to capacity overload.

Four interviews were conducted to assist in the research process and to identify standards, guidelines, and training: Fire Chief Dennis Rubin, Fire & EMS Chief for Washington D.C.; Fire Chief Larry H. Williams, Fire Chief Dothan, Alabama; Deputy Chief Jeff Birdwell, Madison, Alabama; and Battalion Chief Johnny Givens, Dothan Fire Department. Rubin was interviewed to provide the history of the Dothan Fire Department in ICS use. He was the Fire Chief for Dothan from 1996 to 2001 and the city manager for Dothan 2002 to 2003. Williams is the current Fire Chief for Dothan and has been a member of the department from firefighter to fire

chief spanning nearly 20 years. Both of these chiefs reviewed the history of the department in regards to ICS use in the department and IMT development.

Birdwell and Givens provided information in regards to the state of Alabama's development and training of the Type 3 team for the state. Interview techniques utilized were telephone, email, and personal discussions.

The literature review allowed the author to identify minimal standards for members of an IMT, the type of teams, history of the ICS, and guidelines and procedures for team usage. Along with the review of printed and web-based documents, interviews were conducted with chief officers who have been involved with the Dothan Fire Department and Alabama incident management teams.

During the EOFSOEM class the author attended in September 2008, lead instructor and retired deputy fire commissioner for the Philadelphia Fire Department, Phil McLaughlin stated that 32% of fire ground fatalities are impacted by poor command and control (safety, accountability, span of control, etc) (personal communication 9/28/09). This point is important since one of the five operational objectives of the USFA is to reduce firefighter fatalities from fire.

PROCEDURES

The research methodology for this applied research project was of the action research method. The desired outcome for the ARP was to make a written recommendation for the DFD to develop an IMT. This IMT would not only be used for the City of Dothan but also in the surrounding communities.

The first step taken in the research process was to gather information from fire departments across the country. A survey was developed utilizing the online survey company “Survey Monkey”. This service allowed the author to build an online survey that could be sent to various departments across the country. The survey was sent to the National Society of Executive Fire Officers (NSEFO) for distribution (See Appendix A) through their email network. The survey included a section for point of contact information and contained nine survey questions. The results for the survey are included in Appendix B. Question two asked if the department had an incident management team. If they answered “no”, they were requested to answer the next survey question and that concluded their participation. If they answered yes to the second question, they were instructed to skip the next question and finish the rest of the survey. The survey was provided to the recipients from October 28-November 28, 2009. There were 145 responses to the survey. Of the 145 responses, 105 or 72.4% stated they utilized an IMT.

The next step of the project was to conduct a comprehensive literature review. The literature review examined national consensus standards, how teams were utilized nationally and locally, training requirements, and identifying funding sources. The literature review looked at textbooks, periodicals and journals, web-based documents, and previous EFO ARP’s listed in the Learning Resource Center at the National Fire Academy. Standard Operating Procedures and Guidelines were provided by some of the external survey respondents and were reviewed. Documents that were printed from the internet were saved and cataloged based on their applicability (training standards, research & reports, etc) to the project. Notes were taken utilizing a Microsoft Word document and referenced while the paper was being written.

On February 7, 2009, an internal survey was conducted within the Dothan Fire Department. Surveys were emailed to the department's Senior Staff which included: the Fire Chief, Fire Marshal, Training Chief, six Operations Battalion Chiefs and the Administration Captain. Of the ten surveys produced, five were returned by the requested deadline of February 16, 2009. This survey (Appendix C) questioned staff members on whether it would benefit the DFD to utilize an IMT, which positions need to be included and filled on the team, and whether there should be non-firefighters included on the team. Also included in this survey was how the team should be activated and if firefighters from different departments should be included on the team.

Interviews were conducted beginning the week of February 22, 2009 with four chief officers from three different fire departments. The interviews were conducted via email, telephone, or face-to-face discussions or a combination of the three. To provide flexibility to the respondents, the questions were emailed to the recipients, and they were allowed to choose how to respond—via email, telephone, or face-to-face. Along with the questions, the recipients were also asked to provide additional feedback and/or comments as they saw fit. The interview questions for Rubin and Williams were focused on the history of ICS in DFD, future recommendations, and potential roadblocks to the development of a local IMT. The questions for Birdwell and Givens were focused around the Alabama IMT since both have been involved with development and the training within the state. Both have deployed for various incidents around the state and have developed experience with IMT issues. The results of the surveys, interviews, and literature review are included in the results and discussion sections of the paper. Appropriate citations and references are included in each section.

The limitations of the external survey assumed that the members answering were knowledgeable of their department's information in regard to IMTs. Another limitation with the external survey was it should have been sent to fire departments of similar sizes (population served, department size, area served). A comparison between DFD and departments of similar size would have narrowed the survey results and provided a more realistic comparison.

The internal survey was limited based on the number of responses returned. Only five of ten responses were returned. This is critical because the members performing the tasks of an IMT position or those that will have to work with the IMT have missed an opportunity to provide early feedback in the development process.

RESULTS

The results of this project were developed through the analysis of the literature review, the two surveys produced, and the four interviews. Feedback from the surveys and interviews allowed the author to develop a proposal on the department developing an IMT or not.

External Survey

The external survey (Appendix B) for fire departments was used to identify what other fire departments did to develop their IMTs. The questions focused on the type of training required in general categories (question 5); amount of experience (question 6) and the types of experience to be a team member (question 7). Responses to question 5 included local training (69.4%), regional or state training (84.7%), and NFA courses (62.9%). Attending other state schools rated 24.2% and utilizing contract instruction rated at 14.5%. There was not a response for "all of the above" included in this question. Training received from multiple sources was chosen by 71.7 percent of the respondents.

In response to the question on a certain amount of experience to be a member (question 6), 53.2% stated there was no specific amount while 38.7% stated there was. The “other” selection was chosen 10.5% and respondents provided comments which included: “it is the fire chief’s decision who gets to participate”, “the department follows NWCG 310-1 and selection is a nomination process...”, and “rank specific”.

In reference to the type of experience (question 7), 41.9% stated that it was a combination of years on the department and the number of incident responded to. Only 14.5 % chose years and 1.6% chose number of incidents. This question also included an “other” category (41.9%) where participants provided general comments:

Fire chief approval

Application and review of qualifications

Completion of a task book

Combination of certifications and years of service

Captain or higher

Education

Identifying who needed to be included on a local IMT was addressed by question 4 of the survey. Answers ranged from Division Chiefs (39.5%) to Battalion/District Chiefs (73.4%) to be included on the team. In regards to other agency members being included on an IMT, 51.6% stated that other public safety organizations/agencies (police, EMS, etc) should be included and 44.4% stated that other government agencies (public works, finance, recreational, etc) should be included also.

On the question of when the IMT should be utilized within a fire department (question 8), the survey results showed that incidents from second alarm (or greater) fires (48.4%) to

hazardous materials incidents (59.7%) should utilize an IMT. Remarkably, 58.1% of respondents chose non-emergency special events (parades, festivals, etc) where an IMT should be utilized. Additional comments included natural disasters, severe weather, span of control dictates, and multi-jurisdictional incidents.

To identify funding sources, the respondents were asked what was used to fund their training for the IMT (question 9). Answers ranged from member funded (4.0%) to department funded (58.9%), with 27.4% stating funding was a combination of those listed.

Internal Survey

The internal survey was developed and delivered to Senior Staff members of the DFD. Ten surveys (Appendix D) were distributed via a memorandum and five were returned (50%). This survey was designed to identify the thoughts of senior ranking members of the department on whether an IMT would be beneficial and which positions/members of the department should fill Command and General staff positions on the IMT. Eighty percent of the received surveys stated that an IMT would be beneficial to the department. On the question of which command, general, or functional positions should be filled in a pre-designated IMT the results are contained in Table 1.

Table 1

Pre-designated Command, General, and Functional Positions

Position	Response	Position	Response
Incident Commander	60%	Deputy Incident Commander	60%
Information Officer	100%	Liaison Officer	80%
Safety Officer	80%	Planning Section Chief	60%
Operations Section Chief	60%	Resource Unit Leader	0
Situation Unit Leader	0	Documentation Unit Leader	40%
Logistics Section Chief	100%	Support Branch Manager	0
Service Branch Manager	0	Finance Section Chief	40%
Intelligence/Information	20%		

The third question on this survey was utilized for the senior staff members to identify department positions and how they should fill the command, general, and functional positions if filling IMT positions identified in Table 1. Below are the DFD staff positions and the position recommendations by the respondents of the survey.

Table 2

DFD Positions and Position Recommendations

DFD Staff Position	IMT Position(s)
Fire Chief	Knowledge of all positions, Incident Commander, Unified Command (with other City of Dothan Department Heads), & liaison with elected officials
Training & Safety Chief	Incident Commander, Safety Officer, any Section Chief
Fire Marshal	Intelligence/Information, any section chief, Safety Officer, & Incident Commander
Asst Fire Marshals (Captains)	Branch directors, Unit Leader/Boss, Safety Officer, Support functions, support branch manager
First Arriving Battalion Chief	Incident Commander, Deputy IC, Operation Section Chief, Planning Section Chief, & Safety Officer
Second Arriving Battalion Chief	Incident Commander, Safety Officer, Any Section Chief, support function, & Deputy IC
Duty Officer	Any section chief, Deputy IC, Safety Officer, & Incident Commander,
Training Captain	Safety Officer, Branch director, Unit Leader/Boss, support function, Situation Unit Leader
Emergency Medical Services (EMS) Captain	Safety Officer, Branch director, & Unit leader/boss
Training Sergeant	Safety Officer, Unit Leader/Boss, Resource Unit Leader & support function
Administration Captain	Public Information Officer & Liaison Officer
Logistics Sergeant	Logistics Section Chief, Safety Officer & Unit Leader
Public Education Officer	Public Information Officer, Support Branch Manager, Liaison Officer & Safety Officer

One survey did not answer this section, while one survey left some blanks—mostly on the captain and sergeant positions (Assistant Fire Marshals, Training, Logistics, etc).

The fourth question of the survey inquired about the use of non-firefighters (civilians) filling functional positions within the IMT. Sixty percent of the surveys stated “no” and forty percent stated “yes”. Comments provided for the affirmative answers included: “case-by-case” and “utilize the Payroll Clerk to either fill the Finance Section Chief or as the Documentation Unit Leader.”

On the question in regards to allowing firefighters from other departments to be members of a local IMT, sixty percent said yes and forty percent stated no. The last question on when should the IMT be dispatched to an incident, 100 percent chose “upon request.” One survey picked two answers with the second choice being “as the incident dictates.”

On the history of incident command within the DFD, the author spoke with the current fire chief and a previous fire chief who was hired outside the City of Dothan. Fire Chief L. H. Williams, the current Fire Chief and a member since 1988, stated that beginning in 1990 the department “...began implementing a very limited incident command structure. Classes were held explaining what IC was and how a strong command and control presence was vital to the safety of our members.” (personal communication, March 1, 2009). There were discussions on the use of command, primarily the sections—Command, Operations, Logistics, Finance, and Planning. In 1996, the department implemented a command system, with the system being modeled after Brunacini’s *Fire Command*. This system included brief incident reports (BIR), establishing command at every incident, plain text communications (ten-codes had been used since 1902), assigning sectors (currently evolved to groups and divisions), accountability and a stationary command position. Incident Command with the DFD has continued to evolve and

strive towards meeting NIMS requirements to increase and enhance command and control to meet incident needs and the safety of members (Personal Communication, March 1, 2009).

The interview with D.L. Rubin conducted via phone, agreed with what was stated by Williams, and he described what was done to bring the department forward (personal communication, February 26, 2009). Rubin brought the National Fire Academy's 16-hour incident command course to the department. First, Battalion Chiefs and Captains completed the course, followed by the sergeants and firefighters. The other training concept that Rubin stressed was allowing more members to attend residence courses at the National Fire Academy. Members were attending, but barriers were removed to allow all levels of members to attend if they desired.

When asked if there was any development of Incident Management Teams for DFD, Chief Williams discussed the establishment of the Department Operation Center (DOC)¹. The DOC is a permanent facility within the Administration Building that is utilized to manage resources during long-term and/or large scale incidents. The focus of the DOC is an expanded Operations Section that has proved successful when the department is overwhelmed with responses. Rubin's concept of an IMT during his tenure was a "Command Team" utilizing the following:

Responding Battalion Chief—Incident Commander

Non-responding Battalion Chief—Ensures rest of city has fire protection/coverage

Duty Officer—Deputy IC, senior advisor

Second-In Engine Company Officer²—Safety Officer

¹ Prior to 2007, this was the Emergency Operation Facility (EOF)

² DFD dispatches 3 engine companies, 1 truck company, 1 Battalion Chief and an ambulance to structure fires. Other types of incidents (hazmat, technical rescue, etc) receive similar responses based upon the type and severity of the incident.

DFD currently utilizes this same concept in field operations.

A follow-up question in regards to training was presented to Rubin on the use of Crew Resource Management (CRM) which is utilized in commercial aviation. He stated this is a “basic footprint” to limit fatalities and injuries in the aviation world that could be applied to the fire fighting and prevention career field. He utilized the example of the American Airlines crash on the Hudson River just prior to the interview and Sioux City, Iowa where United Airlines Flight 232 crashed. CRM utilizes checks and balances for team building and is very adaptive to the fire service in operations. A CRM program presentation was attended by the author in 2001, and the major components of CRM consists of communications skills, teamwork—leadership, task allocation, and critical decision making (personal communication, February 26, 2009).

When asked as to the different types of experience, education and training needed for members to be a part of an IMT, Rubin stated that DFD should look at the Blue Card system that the Phoenix Fire Department utilizes for its department. The system includes an 80-hour classroom portion and a 40-hour practicum and follows the recommendations from NFPA 1561, *Emergency Services Incident Management System*. Williams stated that DFD is currently doing a similar process but it is not formalized at the writing on this paper. Williams also stated that utilizing CRM could prove beneficial, but felt the department was not ready to move in that direction (personal communication, March 18, 2009).

As to the barriers and impacts on the development of an IMT for DFD, Williams believes that the size of our department and utilizing the DOC will prove difficult when it comes to the human resources required to manage a field IMT simultaneously with a DOC IMT. The incident type, size, and complexity should be the determining factor on location of where the IMT should be utilized and “best serve the operations taking place.”

To understand the state of Alabama's Incident Management Team concept when it comes to training, education, and development, two interviews were conducted. Deputy Chief Jeff Birdwell (Madison, Alabama Fire Department) and Battalion Chief Johnny Givens (DFD) are both members assigned to two different Alabama IMTs. J. Birdwell stated currently there were no experience requirements for firefighters who want to be members of the Alabama teams (personal communication, 2/25/09). J. Givens stated that fire chiefs were not allowed to be on the team, they could be any rank of firefighter or a non-certified firefighter (personal communication, March 9, 2009). Each team must have a minimum of 12 members and they must complete the following courses:

- NIMS 100, 200, 700, 800, 703, 300 and 400

- Introduction to Command and General Staff for ICS

- All Hazards Incident Management Team (Type 3)

- Position specific training (operations section chief, planning, etc)

In addition to the courses, each member needs to perform shadowing with a like position at an actual Type II or I incident where they are checked off for specific tasks required for their position (J. Givens). Each team is placed on a 'stand-by' status and is deployed if requested and activated. Birdwell stated that there are three teams, one for each region (north, south, and central) and is multidiscipline: fire, EMS, EMA, and public works (J. Birdwell). One barrier to the teams includes educating the local level that the capabilities exist. The other potential barrier included the local level understanding that the IMT will not "take over" and not allow the local responders to participate. Another barrier Givens stated was the time for deployment to an incident. Within the state of Alabama, an IMT could be on scene within an hour. If they were to deploy out of state, it could take as long as 48 hours.

According to Birdwell, who attended a class for his training to be a member for one of the Alabama IMTs, the cost for the AH-IMT course utilizing contract instruction is approximately \$60,000 for a 36-person class (personal communication, March 27, 2009). The National Fire Academy courses are fully funded (travel expenses, lodging and course costs) for members who are accepted once-a-year. Personnel can attend additional courses at their own expense (USFA 3, 2008). Attendance costs for command and control courses at the Alabama Fire College vary based on the course attending. Lodging, meals, and textbook costs are not covered. At times, the Alabama Fire College will host courses that are fully funded based on federal grants where there are not costs except for meals (AFC, 2008).

When figuring courses costs, other types of expenses may need to be included when planning for large scale training. Man-power hours, overtime costs associated with back-filling positions when firefighters are attending the course can have an impact on the training needs. The author facilitated a grant sponsored course in 2005 and where the additional costs of training were identified while training its technical rescue team in Structural Collapse Rescue. The eight day course cost \$60,000. This course was funded through Homeland Security grants and was the last opportunity in the state that year. Special funding was needed and provided by the Dothan City Commission for overtime costs to backfill fire stations during the class.

DISCUSSION

Throughout the research of the project, it became apparent that the DFD is continuing its evolution in incident management. The department currently has the basic capability of a Type 4 incident management team, but there is a need for additional and continual training. DFD has been working on completing NIMS training to meet basic compliance with Homeland Security

Presidential Directives (HSPD) # 5 and #8. All staff positions (training, fire marshal, logistics, and administration) have completed all required NIMS courses up to ICS 400. During the establishment of our training plan, it was felt these members would fill positions in the DOC and provides support to field operations and the Houston County EOC. The next phase was training for all captains to the 300 level, which is currently being achieved during the writing of this paper. Givens and Birdwell identified that members on the Alabama teams had to be current with NIMS requirements. A driving factor for the completion of NIMS training is to ensure the DFD will continue to meet national standards as well as maintain federal grant funding to assist with department development of specialty teams.

Along with the NIMS training, DFD still maintains the use of incident command as discussed by Rubin and Williams. After the initial training provided to all members of the department in 1996 and 1997, new members are immersed into ICS when they are hired in. They receive additional training in addition to the basic certification school and the NIMS components they are required to complete during their probationary year. The additional training includes review of all department SOGs in regards to incident command. These SOGs include: incident command, DFD accountability system, BIRs, two-in/two-out, and safety. DFD provides a good foundation for all members, including those who could chose to be a member of a local IMT.

Along with basic ICS/IMS training and at a higher level, captains and battalion chiefs are encouraged to complete post incident analysis of the incidents they operate at and to review case studies from other departments and understand lessons learned. All members continue to be encouraged to attend the National Fire Academy and other courses to educate themselves and others. Battalion Chiefs are required once-a-year to attend a career development course.

According to the literature reviewed, specific position training for the various general staff positions is a requirement for higher level IMT teams (FEMA, 2008; & USFA, 2008). The NWCG's PMS 310-1 includes the professional development courses for 13 specific positions. Miller stresses the need for command level training for fire chiefs and executive staffs when dealing with incident management (Miller, 1999). The foundation has occurred for DFD, but providing continual and advance training is critical to develop the department team and a future local IMT. Training provided to DFD members who are a part of the Type III Alabama teams is beneficial to the department.

While experience is critical, it does not disallow someone from being excepted from being a member on the Alabama teams, nor in other departments. In the external survey (Appendix C) conducted of other departments, 53.2% stated there was no certain amount of experience required to be a team member. Of the ones that required a certain amount of experience, 41.9% stated it should be a combination of years and number of incidents responded to. Probationary firefighters most likely will not be on an IMT, yet if they come with the education and experience from another fire department they could prove beneficial. A strong education and training program should be in place to enhance the experience skills of team members. Donahue et al, stated that the training was the one of the top four statements that came out of the AH-IMT Conference held in March 2009 (Donahue et al, 2009). The number one recommendation from the same report was "A national standard that specifies required minimum training, knowledge, and experience should be developed for all IMTs and for all positions" (pg 13). This report also included four other recommendations that revolved around the training and experience of IMTs for the United States.

What should be used as the foundation for IMT development? From the literature review, surveys and interviews, the six-day course *Command and General Staff Functions for Local IMTs* along with the NIMS basic curriculum requirements would assist in the professional development of a local IMT (USFA, 2008). The USFA also lists for Type 3 teams the *All-Hazards Incident Management Team (AH IMT)* course. DFD chief and staff officers have already completed the NIMS basic requirements. It could be beneficial to not only complete the *Command and General Staff Functions for Local IMTs* but also to complete the *AH IMT* course. This allows these officers to understand what the Type 3 team from Alabama will be doing if they are requested to respond or DFD is providing support to other local areas through mutual aid and deployment.

This is supported by Zuber. He believes that local IMTs, specifically local Type 3 teams, bring advantages to the response. He stresses that a local Type 3 team has advantages over a non-local team. Trust is easily accepted since members know the local politics and policies, and they know the responders (Zuber 2008). Having DFD members understand what the Alabama Type 3 teams are capable will help in building trust at a large-scale incident.

There are plenty of models to follow when establishing a team, such as Chesterfield Fire & EMS, state of Wisconsin Type 4 IMT Development Plan, San Diego, and Phoenix. These models follow the national standards adapted to their local needs. DFD has taken informal steps to establish command teams for large scale incidents but has not created a formal IMT that could be used within operations for city operations or in the surrounding area.

While writing this paper, Dothan, southeastern Alabama, and the panhandle of Florida experienced flooding over a week long period (March 28 through April 4, 2009). Several rain storms dumped over fourteen inches of rain in Dothan. The DFD was tasked heavily during the

first day when the flooding was the worse. The Department Operation Center (DOC) was immediately activated and once staffing arrived, department operations began to stabilize to a more controllable environment. Better training (position specific), understanding position assignments roles and responsibilities, and utilizing the IMT concept in the DOC could have enhanced the management capability of the department during this historical flood event.

The internal survey conducted with the senior staff of the department identified positions they felt were important to an IMT that should be staffed. One of the barriers identified by Williams was being able to staff the DOC and the IMT simultaneously. Training members to staff the general staff positions for an IMT would be the same as the positions within the DOC. They are essentially doing the same thing. DOC staff members could function in the field performing the same skills as they would in the DOC. A good foundation has been laid by Rubin with the command team concept and the next step by Williams of developing the DOC to be utilized in managing large-scale incidents. It appears the next step is formalizing the training process with the positions in the DOC to mirror a local IMT. This will do two things. First, there will be a better understanding of the roles and responsibilities within the DOC, and secondly these members could “take the show” on the road utilizing the department’s mobile command unit.

Moynihan discusses the lesson learned from the Laguna and Cedar wildland-urban fires where the pace of the situation was developing too rapidly for the unified command structure to keep up. Incident Action Plans (IAP) became obsolete before command staff could “...implement strategic objectives and gain control...the situation repeated itself several times over the course of many hours until adequate command level personnel were in place” (Moynihan, 2007). With the recent experience of the flooding that occurred here in Dothan on

March 28, 2009, it was tough to gain control of resources, communication, and coordination of resources to respond. Command and Senior Staff personnel of DFD should have the knowledge and capability to activate and operate within the DOC. While experience is an excellent tool for learning, it should not be the only one. Developing a local IMT to perform in the DOC will improve the response, command, control and coordination during large-scale incidents.

Miller identifies the benefits of pre-designating an IMT which includes providing highly qualified personnel who are trained and work together as a team; increase the speed and proficiency of stabilizing a large-scale incident; and “to reduce the impact from a complex, time consuming incident so the department can also maintain response capability for other incidents” (Miller, 1999). Fortunately during the flooding on March 28, 2009, we did not have the need to respond to any structure fires which would have taxed our response element drastically. Again, this is the importance of having an IMT in the DOC.

Dothan is the only career (paid) department within Houston County. DFD is home to two Alabama Mutual Aid System (AMAS) regional response teams: HazMat 8 and Heavy Rescue 8. Through the various mutual aid agreements established, DFD provides various emergency services to the surrounding community. Depending on the nature of the mutual aid, a battalion chief is also dispatched. An additional mutual aid response could be staff members responding as a local IMT once the training and education is accomplished. Along with team members being trained, the surrounding departments would have to be educated that the IMT would be there to assist, not to take over. Birdwell identified these two road blocks in his interview. Local agencies have to know the capability is available and that an IMT is not there to take over. In the 1970’s, California departments and agencies were able to overcome similar roadblock (IFSTA, 2007). Fire departments and agencies overcame their differences in incident command. The

potential of enhancing the response capability in Dothan, Houston County, and other surrounding communities could occur as long as a good education program and training opportunities are provided to all involved.

An IMT supports a local fire department in reducing the number of line of duty deaths and injuries in the US Fire Service. There have been many injuries and deaths that have been contributed to command & control, accountability, communications, and safety. Each of these are addressed when there is a strong incident commander and for large-scale events an IMT. Multiple incidents during periods of heavy run-volume, large-scale structural fires and other operations that do not occur on a daily basis increases the chances of getting a firefighter injured. Having a well-trained, dedicated, all-hazards IMT will decrease this potential, meeting the USFA's objective of reducing line of duty deaths and injuries on the fire ground.

The cost of training all staff members will prove costly. The cost of bringing the *AH IMT* course to Dothan begins at \$60,000. All staff members could not attend at the same time because the department has to still provide daily operation. This would mean having a course offering twice, which will double the cost. These costs do not include any other expenses that occur during course delivery. Sending DFD members to either the Alabama Fire College or to another fire department to complete the courses is expensive also. Again, everyone cannot attend at the same time. This creates an additional cost of travel. With a limited training budget and the current state of the economy, approval of this course expense may not be approved.

Grant funding for this course would be a large help. Most of the grants through Homeland Security that the department has received for training over the last four years have not covered overtime costs for backfilling. Grants for training have proved very beneficial in the

past and would get the department one step closer to completing the training but will not cover all costs associated with the training.

RECOMMENDATIONS

The DFD has already established an informal IMT through the use of a command team at individual incidents and through its DOC. The next step is for the DFD to formalize its training criteria for the staff members who will operate within the DOC. A formalized training program will ensure that depth is built for each position; each member understands the purpose of the DOC and to ensure that members can work at a large-scale incident that stretches over an extended amount of time. It is evident that the DFD has a strong foundation to build its IMT to operate within the DOC and in the field if need be. To make it to the next step though a thorough training plan remains to be established.

As mentioned above in the Discussion section, potentially credentialing each member every two years would need to be evaluated and further research conducted. This evaluation would have to include researching fire departments that have done so and to see if there is a benefit. To meet additional training costs, the department should seek out additional funding through grants, identify and send members to train-the-trainer courses, and consider sending members to courses that are fully stipend to beat costs associated with the training. Internal training still can create costs, but it is normally cheaper than sending everyone to an in-residence course.

As the IMT develops members, the department will gain trust in the team and the use of the DOC. While the DOC has been established for several years and certain documents for its use are established, there has been no formal training program identified to help with

understanding its concept and use. The next step for the DOC is to formalize the training program, update the appropriate references (e.g. position checklists, operating guidelines and plans), and continue upon the foundation already established.

With any plan, a timeline should be established to gauge if the program is working or not. With the recent flooding that occurred in March and the upcoming hurricane season fast approaching, the time is right to identify what we need to do and to pursue it. Everything will not be accomplished before June 1, but large steps forward can occur. Utilizing the Hurricane season, and other significant incidents during the same period to evaluate the use of the DOC/IMT will provide a timeline for evaluation.

Large scale, drawn-out incidents do not happen everyday. It is vital for the DOC/IMT to be prepared to handle the emergency incidents that could emerge. Focusing on only severe weather instead of an all-hazards format to developing the team could create shortfalls in capability. Whether it is flooding or a general emergency at the local nuclear plant, DFD must ensure that its incident management team is ready to be activated and utilized. An IMT must be ready to coordinate, command, and control large-scale incident to reduce the possibility of firefighter injuries and deaths.

Further research on the subject could include reviewing case studies and after action reviews of IMT use across the nation. Case studies and after action reviews can provide “lessons learned” for the team to learn from and apply towards the training program. Already for significant incidents, battalion chiefs and captains are to complete a Post Incident Analysis (PIA). This could be simply done by making it a requirement to complete one within the department guideline for the DOC.

The problem identified in this paper was that DFD and Houston County did not have a program for developing an IMT to respond to large scale incidents and bridge a gap before state level mutual aid could arrive. Through the research completed, it was identified that DFD has a foundation for an IMT through its history over the last 12 years, ICS training and education, and current operations. It was identified that the IMT concept in Dothan needs additional training and education must continue to evolve. Through the use of the DOC, DFD does have an IMT, but it was not clear as to who does what, how, and when. The purpose of the paper was to identify and make a recommendation to the DFD Fire Chief (Appendix D) for developing a local IMT. The initial stages are currently there, the DFD just has to move forward. An opportunity exists with the recent flooding that could allow additional funding to flow to the department to get members additional training. This training will not include just the fire department but will include other City departments to establish an all-hazards commitment.

As the IMT continues to develop there is a strong possibility that it could be used with other agencies and organizations around the community. For mutual aid response, the DOC could be activated to assist with resources, or members who have been trained to utilize the DOC could respond with the City's mobile command module. This would place the IMT at the field level to assist our neighbors if the need arises.

Training costs will have a large impact but should not be the deterring factor to move forward. Through relationships built with other departments, DFD members attending courses and experience of members, DFD can still move forward. Through developing an exercise program (tabletops, functional and full scale exercises), independent study programs, and utilizing the knowledge gained from DFD members who have received certain courses (e.g. AH-IMT course, position specific courses, etc) an effective training program can be developed.

Another avenue is to continue to encourage members to attend Command and Control classes at the National Fire Academy.

Other departments have developed an IMT to meet their needs. The research has demonstrated this clearly. In some states an IMT program was developed at the state level for either developing regional teams or criteria for local departments to use. The NIMS and USFA encourage the use of IMTs. Within our training as firefighters since the first day of candidate/rookie school, we are taught the team concept. This should continue as we move towards the command level of the department. If an incident rapidly expands, a lone IC can become overwhelmed quickly. Command and Control is an issue that is identified with fire department injuries and deaths. Having a strong incident command program that includes IMT development, training, and use will reduce line of duty injuries and deaths.

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APPENDICES

Appendix A

Incident Management Survey

I am conducting research for my Applied Research Project for the Executive Fire Officer Program through the National Fire Academy. I am researching what my department has done in the past with incident management, what other departments currently do, how other departments developed an IMT, and how we can develop an IMT for our department and city. Your assistance in completing this survey is greatly appreciated.

1. Please provide a point of contact in case there is a need for a follow-up question or clarification

a. Name: _____

b. Department: _____

c. Address: _____

d. Address 2: _____

e. City/Town: _____

f. Country: _____

g. email address: _____

h. Phone number: _____

2. Does your department utilize an Incident Management Team(IMT) for large scale/major incidents?

a. YES

b. NO

3. If you answered no to Question 2, what do you use to manage large scale incidents?

a. No change from normal operations

- b. Fire Chief handles all incident management
- c. Incident Commander handles all incident management
- d. Other: _____

Thank you for completing the survey

4. Who participates/trains with your IMT (Check all that apply)?

- a. Battalion/District Chiefs
- b. Division Chiefs
- c. Staff Officers (Prevention, training, administration, etc)
- d. Assistant Chiefs
- e. Deputy Chiefs
- f. Fire Chiefs
- g. Other public safety organizations/agencies (Police Department, EMS Agency, sheriff's dept, etc)
- h. Other government agencies/organizations (public works, recreational department, Finance department, etc)
- i. Other: _____

5. What type of training do you provide to you members (check all that apply)?

- a. Local training only (in-house development courses, etc)
- b. Regional or state training (state required ICS/IMT training, NFA hand-off courses, etc)
- c. National Fire Academy courses (on-course courses, independent study, etc)
- d. Attending or receiving other state school instructors (Texas A&M IC/UC course, etc)
- e. Contract instruction

- f. Other: _____
6. Does your department require a certain amount of experience to be a member?
- a. Yes
 - b. No (skip to question 8)
 - c. Other: _____
7. If yes to question 6, what type of experience does your department?
- a. Years
 - b. Number of incidents responded to
 - c. Combination of the above
 - d. Other: _____
8. What type of incidents do you use an IMT for (check all that apply)?
- a. Second alarm fires or greater
 - b. Hazardous materials incidents
 - c. Technical Rescue (structural collapse, trench, etc) incidents
 - d. mass casualty incidents
 - e. Terrorism
 - f. Aircraft incidents
 - g. Special events (parades, festivals, VIP visits, etc)
 - h. Other: _____
9. What kind of funding did you use for team development and on-going training (check all that apply)?
- a. Department funded
 - b. Locally funded (city or county funds)

- c. member funded
- d. Federal grant funded
- e. Federal grant funded
- f. State or regionally funded
- g. Combination of any of the above
- h. Other: _____

10. Is it possible for you to provide a copy of your IMT guideline/procedure/instruction to pwebb@dothan.org?

Thank you taking the time in completing this survey

- a. Yes
- b. No
- c. Additional comments: _____

Appendix B

Results of Survey from External Fire Departments

Q2. Does your department utilize an Incident Management Team for large scale/major incidents?	
YES	72.4%
NO	27.6%

Q3. If you answered No to question 2, what do you use to manage large scale incidents?	
No Change from normal operations	7.0%
Fire Chief handles all incident management	0.0%
Incident Commander handles all incident management	35.2%
Other	57.7%

Q4. Who participates/trains with your IMT (Check all that apply)?		
Battalion/District Chiefs	73.4%	91
Division Chiefs	39.5%	49
Staff Officers (Prevention, training, administration, etc)	58.1%	72
Assistant Chiefs	58.1%	72
Deputy Chiefs	59.7%	74
Fire Chiefs	70.2%	87
Other public safety organizations/agencies	51.6%	64
Other government agencies/organizations	44.4%	55

Q5. What type of training do you provide to you members (check all that apply)?		
Local training only	69.4%	86
Regional or state training (includes NFA handoff courses)	84.7%	105
National Fire Academy (includes independent study)	62.9%	78
Other state school instructors	24.2%	30
Contract instruction	14.5%	18

Q6. Does your department require a certain amount of experience to be a member?	
Yes	38.7%
No	53.2%
Other	10.5%

Q7. If yes to question 6, what type of experience does your department require?	
Years	14.5
Number of incidents	1.6
Combination of above	41.9
other	41.9

Q8. What type of incidents do you use an IMT for (check all that apply)?		
Second alarms or greater	48.4%	60
Hazardous materials incidents	59.7%	74
Technical rescue	50.8%	63
Mass casualty incidents	54.8%	68
Terrorism	48.4%	60
Aircraft incidents	39.5%	49
Special events (parades, festivals, etc)	58.1%	72
Other	46.0%	57

Q9. What kind of funding did you use for team development and on-going training?		
Department funded	58.9%	73
Locally funded (city or county)	33.1%	41
Member funded	4.0%	5
Federal grant funded	21.8%	27
State or regionally funded	27.4%	34
Combination of above	27.4%	34
Other	9.7%	12

Appendix C

DOTHAN FIRE DEPARTMENT

MEMORANDUM

TO: Battalion Chiefs

FROM: BC Pete Webb, Battalion 2-B

DATE: February 7, 2009

SUBJECT: Survey



I am completing an Applied Research Project for the EFO program through the National Fire Academy. For this project I am researching the development and use of an Incident Management Team (IMT) to assist with large scale incidents within the City of Dothan and surrounding local area³. An IMT typically includes an incident commander, command staff, general staff, and some support positions. This research project supports the requirements for my Executive Analysis of the Fire Service Operations Management course I completed in October 2008.

I would appreciate if you would complete the attached survey and return it to me by February 16, 2009. The information provided will be a great assistance to my project. You can return the survey to my mailbox located at Fire Administration. If you have any questions, please let me know. Thanks for your time and assistance.

³ This level IMT would be used within the City of Dothan and the surrounding area before utilizing state level mutual aid

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IMT Survey Memo

1. As described in the cover memo, would you consider a pre-designated incident management team a valuable asset to the Dothan Fire Department in filling incident command positions for large scale incidents?

YES NO

2. If established, which command staff, general staff, and/or functional positions would be appropriate for a pre-designated IMT within the Dothan Fire Department for large-scale incidents? Please check all that apply.

- | | | | |
|--------------------------|-----|---------------------------|-----|
| Incident Commander | () | Deputy Incident Commander | () |
| Information Officer | () | Liaison Officer | () |
| Safety Officer | () | Operations Section Chief | () |
| Planning Section Chief | () | Documentation Unit Leader | () |
| Situation Unit Leader | () | Resource Unit Leader | () |
| Logistics Section Chief | () | Support Branch Manager | () |
| Service Branch Manager | () | Finance Section Chief | () |
| Intelligence/Information | () | | |

3. Concerning the positions listed above, what staff or functional positions of the ICS would you expect the following officers to be prepared to fill at a large-scale incident? (Note: Please provide multiple answers if appropriate and answer none if you would not consider assigning to an individual staff officer)

- a. Fire Chief _____
- b. Training & Safety Chief _____
- c. Fire Marshal _____
- d. Asst Fire Marshal (1) _____
- e. Asst Fire Marshal (2) _____
- f. Asst Fire Marshal (3) _____
- g. 1ST Arriving Battalion Chief _____
- h. 2nd Arriving Battalion Chief _____
- i. Duty Officer _____
- j. Training Captain _____
- k. EMS Captain _____

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IMT Survey

l. Training Sergeant _____

m. Administrative Captain _____

n. Logistics Sergeant _____

o. Public Education Officer _____

4. If an IMT were established for the department should the Dothan Fire Department consider allowing non-firefighters (civilians) to fill functional positions within an IMT?

YES NO

If YES who? _____

5. Currently the Dothan Fire Department has members assigned to the Alabama Mutual Aid System IMT. In developing a local IMT for the immediate area and/or region, should the IMT consist of members from other fire departments?

YES NO

6. If an IMT is established when should it respond to the incident?

- a. Greater than a first alarm assignment
- b. After _____ time at the scene
- c. Upon request
- d. Other (please specify) _____

Appendix D

DOTHAN FIRE DEPARTMENT

MEMORANDUM

TO: Chief Williams

FROM: BC Pete Webb, Battalion 2-B

DATE: April 15, 2009

SUBJECT: Incident Management Team Development-
Applied Research Project & Recommendations



I have completed my Applied Research Project (ARP) for my third Executive Fire Officer Program (EFOP), *Executive Analysis of Fire Service Operations in Emergency Management* (EAFSOEM). Through my interactions with you in the developing of my research, interviews conducted, and general discussion, I have been looking at the development of a local incident management team (IMT) for our department operations and assisting with the surrounding communities. This memo will serve as an executive summary of the ARP and summarize my recommendations for the development of an IMT. A copy of the ARP is being provided to you also if you require additional information and of course I am available for any questions you might have. From the research completed and participating in several incidents and training opportunities over the last 12 months, I believe an informal IMT is already in place used at the incident command posts and within the Department Operation Center (DOC).

Recommendation

The department should formalize (possibly credential) its training program to staff the DOC and thus provide an IMT for the City of Dothan. Once we have developed our team, we can invite other local jurisdictions to help in developing a local IMT for Houston County. It is understood that this will take time to be built properly over the next 18 to 24 months.

Background & Current Operation

Currently our department has an excellent foundation when using incident command (IC). Our members are educated and trained to use IC from the first day of hire with the department. Since 1997 we have educated and trained all new members of the department to utilize incident command from the single unit (Engine Company, Supply Unit, and/or off-duty member) to the large scale incidents (structural fires, mass casualty incidents, hazmat, etc).

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IMT Recommendation

With the National Incident Management System (NIMS) requirements brought to us in 2004/2004 we have ensured that every member has met the minimal requirements (ICS 100, 200, 700, and 800). During 2007 and 2008 we began the process of completing ICS 300 & 400 with all staff members and this year we are meeting the requirements of getting our captains to the ICS 300 level. There will always be make-up training due to new hires and promotions (Chief Hutcheson and Captain Taylor as examples).

We also have two chief officers who are currently members of the Alabama Mutual Aid System (AMAS) for the South region IMT. Each of these members has completed the *Command and General Staff Functions for Local IMTs (O337)* and the six-day course—*All Hazard IMT (O305)*. Battalion Chiefs Givens and Appling also must complete the shadowing portion of the training with a federal Type 2 or 1 team to complete their training. Along with these two members, several members have completed various ICS courses from the National Fire Academy, Alabama Fire College, and Texas A&M to name a few. The foundation is good, we need to build on it and develop our “Incident Management Team” through the use of the Department Operation Center and Command Team concept we currently use.

Currently, during day-to-day operations, the department operates under two field operations battalion chiefs. A duty officer is assigned each week to assist with operations and to ensure the city is covered when both BCs are assigned to incidents in or around the City of Dothan. Staff officers (prevention, administration, and training) assist with operations based on the needs of the incident(s). At normal fireground operations, the second-arriving engine company officer is assigned as the Safety Officer. During incidents that are high in complexity, require a large amount of resources, continue for days, or multiple large scale incidents going on simultaneously, the DOC is activated and staffed to the appropriate level. Two to three staff officers can also be assigned to the Houston County EOC and operate the Emergency Support Functions (ESF) #4 Firefighting services, #9 Urban Search & Rescue, and #10 Oil & Hazardous Materials response. Along with ESF support, Captain Etheredge reports to the EOC to provide public information for the City and Houston County.

The DOC is staffed in the following manner:

- Level 1: DOC technician ensures all equipment is working, radios are functional, appropriate programs (CAD Supervisor Screen, Web EOC, etc) are working. Call volume is monitored but not tracked.
- Level 2⁴: Planning Section Chief, Planning Section Chief Deputy, and DOC Technician are staffed. Planning begins projecting needed resources; weather conditions and on-going operations are monitored, DOC is activated. Calls are monitored more closely and large scale incidents are tracked

⁴ EOC could be staffed based on the incident(s) also

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IMT Recommendation

- Level 3: All positions in Level 2 are staffed in addition to: Logistics Section Chief, Operations Section Chief Deputy, DOC Manager Deputy and liaison positions (Dothan Police Department, Leisure Services, and Dothan Utilities). The Mayor, City Commissioners, and the City Manager should be placed in the Fire Chief's Conference Room and provided with regular updates by the Fire Chief and/or the DOC Manager. Calls are tracked and can be diverted by the DOC staff

The Hurricane/Severe Weather Plan has necessary checklists for both the station and administration levels of the department. There are also position checklists for each position within the DOC. ICS forms are located on the network server and a folder has been added to each computer's desktop in the DOC. Blank printed forms are also in the DOC supply cabinet

Training Needs

In order to build depth to fill positions within the DOC all staff members should be familiar with each position roles and responsibilities, receive training in each of these positions, and make modifications to our reference material. The following list is the recommendation based on the recent experiences, post incident analysis, and the research completed:

- Continue with the NIMS 300 and 400 training for members of the department who need to complete requirements:
 - ICS 300 for all captains and possibly sergeants where scheduling allows
 - ICS 300 & 400 for all staff positions (Training, Prevention, and Administration)
 - Continue the ICS core courses for all members (ICS 100, 200, 700, & 800)
 - Administrative Staff positions (Admin Assistant, Accounting Clerk, and Secretary complete ICS 100 and 700)
- Provide training and education opportunities to Staff members who could fill DOC positions
 - Review position checklists and ask for feedback
 - Review Hurricane/Severe Weather Plan and ask for feedback
 - Conduct a tabletop exercise (TTX) utilizing the references (position checklists, etc)
 - Conduct a functional exercise with members staffing the positions
 - Training on accessing WEB EOC and the CAD Supervisor Screen on H.T.E.
 - Develop a training plan for other city department heads and their senior staff to complete NIMS and ICS training/certification
 - Encourage members to complete IS-275, Emergency Operations Center (EOC) Operations
- Encourage Communication Center senior dispatchers to observe and participate in the exercises
- Staff members complete ESF self-study courses to understand the EOC roll in county operations

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IMT Recommendation

- Make an attempt to bring the All-Hazards Incident Management Team course to the local area or have senior staff members attend the course
- Develop and utilize a credentialing system to maintain staff member skills bi-annually or as directed by the fire chief
- Utilize and staff the DOC during large-scale exercises (Farley Drill, Deployment exercises, etc)

Reference Needs

Having comprehensive references and checklists assist members in the operation of the DOC and as a member of an IMT

- Revamp the position checklists to meet the needs of the department and NIMS qualifications
 - Include seating arrangements
- Revamp the Severe Weather/Hurricane Plan to an All-Hazards Plan to include incidents and events
 - Ensure checklists included in the plan are inclusive of needs for and All-Hazards Emergency Operations Plan
- Review and revamp as necessary SOG # 50
- Ensure each position has the necessary reference material needed to functional appropriately
 - Electronic ICS Forms
 - Pen and paper for notes
 - Dry erase markers and erasers
 - Up-to-date Resource Manuals
 - Phone books

DOC staffing

Utilizing the current staffing plan is supported by the research and the internal survey conducted. Our DOC staffing is similar to staffing a field IMT. Realizing that since the DOC is based on ICS principles, the staffing could expand and/or be reduced based on the needs of the incident(s) or event(s). Similar staffing can be used for annual events such as the National Peanut Festival. Any deviation from the All-Hazards plan for staffing needs, shall be annotated in the Incident Action Plan (IAP) for that event.

Page 5
IMT Recommendation

DOC Positions	Level 1	Level 2	Level 3
DOC Technician	X	X	X
DOC Manager			X
DOC Manager Deputy			X
Planning Section Chief		X	X
Planning Section Chief Deputy		X	X
Logistics Section Chief			X
Operations Section Chief			X
Operations Section Chief Deputy			X
Liaison Positions (Police, Leisure Services, & Dothan Utilities			X

Expenses

Maintaining the DOC does develop additional costs for the department. We should continue to utilize partnerships with the City to help fund the maintenance of current equipment and software and for the purchase of new equipment and software. Training expenses will also occur for the maintaining a high level of readiness and for new requirements through the years. The DFD should be prepared to search out grants for training IMTs, sending members to courses that are fully funded (i.e. the National Fire Academy, Texas A&M's Enhanced Incident/Unified Command course, etc), and send members to train-the-trainer courses so that they can instruct here to save expenses.

Timeline

In order to be prepared for the upcoming Hurricane season and move forward with team development the following timeline is suggested:

April 2009

- Review and revise as necessary all position checklists for the DOC
- Review and revise the DFD Severe Weather/Hurricane Plan as needed
 - Ensure checklists identify member, station, administration and department needs
- Review and revise Operational SOG # 50 as needed
- Begin review of checklist, severe weather plan, and SOG # 50 during staff meetings
- Complete NIMS 300 training for captains and newly promoted/assigned personnel to staff
- Develop a training plan for City of Dothan Department Heads and their senior staff members. Fire Chief to deliver during upcoming department head meeting

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IMT Recommendation

May 2009

- Conduct one table top exercise to familiarize members with positions, checklists, guidelines and plans
- Conduct one functional exercise within the DOC prior to June 1, 2009
- Complete NIMS 100 & 700 courses for administrative staff

June 2009

- Identify All-Hazard IMT courses that will be offered in the area over the next 12 months
- Continue to update Plans, SOGs and checklists as needed and identified

June 1-November 30—Hurricane Season

- Evaluate the use of the DOC when activated for incidents

July –October 2009

- Complete NIMS 300 training for remaining captains and newly promoted/assigned personnel to staff
- Members who are assigned to staff positions in the DOC or the County EOC are encouraged to complete the Independent Study ESF courses from the Emergency Management Institute
- Encourage members to complete IS-275, EOC Operations

December 2009

- Prepare report for senior staff for review, comments and improvements