

Running head: STATE MUTUAL AID RESPONSE TEAM

Disaster Planning: Developing a State Mutual Aid Response Team

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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 the language, ideas, expressions, or writings of another.

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Abstract

The problem was that the Dallas Fort Worth (DFW) Airport Fire Department did not have a formalized fire response team readily available when called to respond on state mutual aids. The purpose was to identify the issues associated with responses of DFW Airport fire personnel outside the airport boundaries. A descriptive research methodology was utilized as a means to identify answers to the research questions.

Mandates at all levels of government regulating the deployment of fire resources outside the airport had to be researched along with identifying what policies and procedures, if any, are doing when responding to non-airport mutual aid. Those airports who acknowledged having deployed apparatus and staffing off the airport were asked to prioritize those types of responses. Equally important, information was gathered identifying the thoughts of DFW Airport stakeholders with regard to off airport mutual aid responses.

In addition to an extensive gathering of data related to mandates, surveys to airport and municipal fire departments were conducted to obtain data related to the research questions. Multiple stakeholders were visited to determine how they viewed the non-airport mutual aid deployments.

Results indicate that there are regulatory devices in existence that address services required on the airport, deployment of resources outside the airport are acceptable as long as the airport maintains those services. The data gathered indicates that a small percentage of those departments surveyed actually have emergency response teams organized for state mutual aid deployments. DFW Airport Public Safety is one of the fire departments who have yet to establish a fire emergency response team. The author has recommended that DFW Airport develop a plan

to establish standard operating procedures and an operational deployment plan for all responses outside the airport proper. Planning will reduce the risk for all.

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Introduction

Responding to a state wide disaster requires planning and coordination among the many regions, counties, and local jurisdictions. The Texas Fire Chief's Association recognized the need to have such a plan post hurricanes Katrina and Rita. After much work, the Texas Intrastate Fire Mutual Aid System (TIFMAS) was established identifying a network of fire resources across the State available for deployment to a State Disaster. Dallas Fort Worth (DFW) Airport Public Safety joined the State network identifying internal resources available for deployment.

The problem is that the DFW Airport Public Safety Department actively participates in the Texas Intrastate Fire Mutual Aid System without a formalized deployment plan readily available to address adequate and appropriate responses. This places responders at risk from the hazards associated with the disaster; natural or man-made. The purpose of this research is to identify the issues relative to response to DFW Airport Public Safety personnel outside the airport proper. A descriptive research methodology will be utilized to answer the following questions. What Federal, State, and local mandates exist regulating the deployment of fire resources outside the airport proper? What are the other airport public safety departments doing with response to non-airport mutual aid? How do other airport departments prioritize non-airport responses? What do the DFW Airport stakeholders think about the non-airport mutual aid?

Background and Significance

The Dallas Fort Worth (DFW) International Airport Board became reality in 1968 and known today as the economic engine of North Texas. Opening in 1973 and owned by the cities of Dallas and Fort Worth, DFW Airport is now the third busiest airport in the world. The airport is located in two counties, Dallas and Tarrant, and is within the city limits of five neighboring cities; Grapevine, Coppell, Irving, Euless, and Fort Worth. Currently ranked second to Denver

International Airport, DFW Airport sits on over 18,000 acres. Airfield traffic reaches almost 60 million passengers annually. Over 1,700 are employed by the Airport Board to maintain the airfield, operations, and provide the best customer service.

The Department of Public Safety (DPS) has approximately 500 employees responsible for Police, Fire and Special Services. Fire Services is comprised of 160 personnel certified by the State of Texas as Structural and Airport Firefighters and by the Department of State Health Services (DSHS) as Emergency Medical Technicians (basic thru licensed paramedic). These personnel are also responsible for hazmat and rescue responses on and off the airport.

Mutual aid is one of the key components of the National Incident Management System (NIMS), which establishes a framework for emergency response. Catastrophic disasters; natural and man-made require such a framework to be implemented into action (Bureau of Justice, 2005). Post 9/11, the federal government now directly supports the establishment of state and local mutual aid agreements with federal resources. Disasters within the United States as well as other countries have led federal, state, and local governments to the development of mutual aid plans. Each recognizing that planning is essential to effective collaboration among the responding agencies. Before fire departments enter into these agreements, they should consider defining requirements associated with their participation, capabilities, deployment processes, and safety for all personnel.

DFW Airport Public Safety deployed fire resources to the Texas Panhandle in support of fire operations associated with wild land fires. Not long thereafter, DFW Airport responded to South Texas to support recovery efforts related to Hurricane Katrina. These two deployments occurred prior to the establishment of what is now known as the Texas Intrastate Fire Mutual Aid System (TIFMAS); a plan developed in Texas to provide fire resources statewide without written

mutual aid agreements (Texas Fire Chief Magazine, Chief Steve Pollock, 2009). Much work went into the development of the state wide plan so that all state resources could be gathered into a one-stop shop processed through an organized means of notification.

This component within the Texas Intrastate Fire Mutual Aid System (TIFMAS) is an electronic list of fire resources available within the State known as the Texas Regional Response Network (TRRN). All departments participating in the TRRN have agreed to provide fire resources when requested through the State. These requests are coordinated through the use of Regional Coordinators assigned to each of the twenty-four regions within the State of Texas. DFW Airport Public Safety participates within the TRRN identifying those fire resources available for response outside the airport proper. The resource list is updated periodically providing up-to-date information should there be a need for a deployment within the State.

Hurricane Ike was the first deployment of State-wide resources utilizing the Texas Regional Response Network (TRRN). DFW Airport lies within the Region Four Network and airport officials agreed to deploy fire resources in the form of one Engine Company consisting of one Company Officer and three firefighters. DFW Engine 53, along with other fire departments from the region responded to the Gulf Coast supporting rescue and recovery efforts associated with the aftermath of Hurricane Ike.

While mutual aid agreements and associated responses are not new to DFW Airport Public Safety, establishment of the State wide system posed new challenges for the organization. Under the state's system, resources from DFW Airport could be summoned due to a regional or state disaster causing immediate reduction in required compliment within the airport proper.

Airports within the United States are regulated by the Federal Aviation Administration (FAA) and an Airport Fire Department must meet specific requirements in order for the airfield

to remain operational for aircraft movement. Airports subject to FAA regulations are rated based on size of aircraft and number of daily aircraft arrivals/departures. DFW Airport is rated as an Index E airport; largest within the FAA rating scale requiring a specified compliment of Aircraft Rescue Fire Fighting (ARFF) apparatus. Deployment of resources outside the airport proper could result in an airfield closure having substantial impact on airfield operations, air carriers, and international travel.

Internally, DFW Airport Public Safety has adopted and follows the National Incident Management System (NIMS) with well established standard operating procedures that provide personnel with guidance so that they may operate in as safe of environment as possible. The intent of the standard operating procedure is to establish consistency allowing for fire operations to be conducted in an efficient and effective manner. Non-airport standard operating procedures must be developed and initiated to establish that same consistent standard for regional and state deployments. DFW Airport's team must have guidance for readiness, notification, responding, operations, communications, tools and equipment, and staffing specific to the deployment.

This project is related to the Executive Development course through several facets. It is important that teams understand their mission and work toward one goal. To accomplish this, we must provide accurate information for each team member. The manual also provides for a technical approach to solving a problem rather than adapting to the problem. The development of off-airport operating procedures will aid the responding team in becoming more efficient and effective (Department of Homeland Security, 2006).

This is in direct support of one of the five operational objectives of the United States Fire Administration (USFA). "To respond appropriately in a timely manner to emerging issues" (Department of Homeland Security, 2006, p. II-2) can be accomplished through the development

and implementation of an organized team to carry out non-airport mutual aid within the State of Texas. By establishing operating procedures and a formalized mutual aid deployment plan, a reduction of risks from the off airport aid will be minimized.

Literature Review

Across the nation, planning for disasters became a focus especially after the terrorist attacks on September 11, 2001 and the most recent fury of hurricanes such as Katrina, Rita, Dolly, and Ike. These disasters challenged the nation and its ability to respond with adequate resources in an acceptable amount of time. A national drive to organize services related to safety and security was evident in 2003 with the establishment of the Department of Homeland Security uniting 22 agencies with one common goal. (Department Of Homeland Security, 2008).

One of the twenty two agencies, the Federal Emergency Management Agency (FEMA) is one responsible for reducing life and property losses. Their mission “is to protect the Nation from all hazards, including natural disasters, acts of terrorism, and other man-made disasters, by leading and supporting the Nation in a risk-based, comprehensive emergency management system of preparedness, protection, response, recovery, and mitigation.” (Federal Emergency Management Agency, 2008, November). In an effort to meet the mission, FEMA employs thousands of personnel to support and prepare the many programs within their authority. One such program was the transformation of the National Response Plan to the National Response Framework in March of 2008.

The National Response Framework (NRF) guides all levels of government in how to conduct an all-hazard response to disasters and other smaller emergencies. The National Response Framework “defines the principles, roles, and structures that organize how we respond as a nation” (Federal Emergency Management Agency, 2008, November). It is a means of

collectively working together at the local, state, and federal levels to mitigate even the smallest incident. This plan, along with the National Incident Management System is a resource for volunteers and career organizations alike to utilize in the mitigation and management of incidents. Partnerships at all levels can apply these principals so that as a nation everyone can respond more effectively to incidents thus providing a better service to our communities. The coordination of all responses led by FEMA is through the utilization of fifteen Emergency Support Functions (ESF's) (Federal Emergency Management Agency, 2008, November).

Emergency Support Functions span across a wide spectrum providing support to areas such as mass care, public works, and transportation. ESF # 4 addresses firefighting and the coordinator is the Department of Agriculture (U.S. Forest Service). This annex provides for coordination of federal firefighting activities and the support of responses associated with wild land, rural, and urban firefighting (Federal Emergency Management Agency, 2008, p. 58).

A key component of the National Incident Management System (NIMS) is Mutual aid. The NRF supports mutual aid among local and state agreements through the National Mutual Aid and Resource Management Initiative. It is essential that there is planning at all levels before anyone enters into an agreement. Lynn (2005) identifies four considerations agencies should do prior to entering into the agreement. They include: “define the participating requirements, assessing vulnerabilities and potential deployment needs, establishing oversight and management authority, and identifying training and funding requirements” (p. vii).

Mutual aid agreements have existed for years and have become common among many fire and EMS services. It is just as important to maintain the agreement going forward as demographics change within the jurisdiction or region. Historically, fire departments have crossed those boundaries and political lines many times to provide assistance and support to their

neighbors. For the agreements to be successful, fire departments need to have an understanding of their neighboring operating procedures and train with them in an effort to provide the most effective operation thus reducing the risk associated with loss of life and property (Compton & Granito, 2002, p. 490). Too often, cooperation among fire departments remained informal with no written procedures to be found. Expectations must be identified and placed into writing so that each organization has a grasp of the other's capabilities. This holds true especially when responding to larger incidents (Stittleburg, 2006, pp. 175-176) .

In 2007, the Centers for Disease Control (CDC) published a document titled "Public Health Preparedness: Strengthening CDC's Emergency Response" (Centers for Disease, 2007, chap. 5). The CDC recognized the need for national response team deployment to the state and local levels to reduce impact of public health threats. These teams specialize in areas outside fire emergency response although they do support the health and well being of responders involved in fire and or hazardous material incidents. To accomplish the mission, the CDC is constantly planning, training, and exercising its teams so that they will be prepared when disaster strikes (Centers for Disease, 2007, chap. 5).

Organizations such as the International Association of Fire Chiefs have played a significant role in assisting and supporting national emergency response. Large scale incidents bring attention upon all levels of government. A standardized approach to all hazards at a broader scope is the basis for plans at the local level (Cote, Linville, & Petraglia, 1986, p. 15-27) Through the Intrastate Mutual Aid System (IMAS), the IMAS Team set a goal to establish mutual aid systems within all 50 states over a three-year period. The State of Texas established the Texas Intrastate Fire Mutual Aid System in 2007. Through this system, the Texas Regional Response Network (TRRN) was formed identifying fire resources across the state available for

activation should the need stretch beyond the capabilities of local and regional assets. (Steve Pollock, 2009, p. 17-22)

Much like Citizen Emergency Response Teams and Incident Management Teams, Fire Mutual Aid Response teams must be trained to the specific needs associated with a particular disaster. In organizing a team, one must focus on standard operating procedures as they are essential in providing direction during the deployment. Development of these procedures will aid the team in focusing on the “how to” while remaining operationally intact as a team. Multiple components can be identified and carried out such as communication, incident command, accountability, etc. (Brunacini A.V, 2002, chap. 3).

Like other states in the nation, Texas Task Force One organized establishing the first Urban Search and Rescue response team in Texas providing a coordinated response to disasters. Team members are trained in rescue and recovery operations, confined space and structure collapse, and other rescue situations due to natural and or man-made disasters. The team is capable of responding to disasters anywhere in the State or if needed, in the Nation. Task Force Teams are a component of the framework that protects the safety and security of the nation. Many teams exist within the U.S. under the direction of FEMA and all are self sufficient and have the ability to function up to 10 days carrying their own tools and equipment to the incident (Texas Engineering Extension Service, 2007).

The Public Works Response Team (PWRT) is one other state resource responsible for multiple facets associated with post disaster recovery efforts. As with other emergency response teams, public works response is necessary in the recovery of infrastructure. Teams have members trained in damage assessment. Most members have technical skills to assess damage to utilities and other specific needs for a community to return to normal. (Texas Engineering

Extension Service, n.d.). The Emergency Mutual Aid Compact is a national agreement focusing on cooperation among personnel and resources. A group of professionals supporting this cause formed the Southeast Airport Disaster Operations Group (SEADOG). This group of airport specific technical experts including airport fire fighters focus on operational support of airports impacted by a large scale disaster. SEADOG in particular supported the recovery efforts post Katrina. (Florida Department of Transportation, 2009)

The fire industry operates using key operational functions and divisions specializing in specific fields. Each is vital to the success of the department above and beyond fire suppression. Readiness and pre fire planning play huge roles in incident safety and the lives of the public (Graner, 2006, p. 167). “Every fire department operation begins with a response of apparatus and personnel” (Bruegman & Smith, 2006, p. 326). Knowing this, fire departments have the responsibility to develop standard operating procedures addressing response plans so that each will be a safe and effective operation. Priorities must be identified inside or outside your jurisdiction providing each member of your department with a road map for a safe return home (Bruegman & Smith, 2006).

Dallas Fort Worth Airport, an Index E airport as specified within the Federal Aviation Regulations (FAR) must also maintain an adequate compliment of Aircraft Rescue Fire Fighting response. These requirements mandated by the Federal Aviation Administration are critical in sustaining the airport’s operational level (Federal Aviation Administration, 2004). Not unlike municipal fire departments in the State of Texas, DFW is governed by the Texas Fire Commission who adopts standards set forth by the National Fire Protection Association (NFPA). One such standard pertinent to this research provides direction for mutual aid outside the airport proper. These standards and others provide for the safety and well being of our personnel on a

daily basis. Many elements of a response must be identified and adhered to in an effort to improve our systems (National Fire Protection Association, 2004, ch. 4).

Disasters within the United States are inevitable. States bordering the Gulf were challenged most recently with hurricanes and flooding. When these occur, federal and state assets are available for local responders and there must be effective collaboration at all levels in an effort to preserve life and protect property. Preparation is a key component in the support of the United States Fire Administration (USFA) operational objectives, specifically “to respond appropriately in a timely manner to emerging issues” (Department of Homeland Security, 2006, p. II-2).

Procedures

This research project utilized a descriptive method and began with literature review. A focus on existing regulatory mandates and policies applicable to the deployment of fire resources outside the airport proper were reviewed by the author. An extensive review of regulations associated with the Federal Aviation Administration and the Department of Homeland Security provided the author with information regulating firefighting resources within the airport proper. State and local policies and procedures were identified through fire magazines, fire industry textbooks, and other fire related internet.

Once all literature was reviewed, the author concentrated on identifying what other airport public safety departments were doing with off airport mutual aid responses. A phone survey of ten airport fire departments was completed to identify if any comparisons could be noted with regard to state deployments. See *Appendix A* for the questions and results of the interview survey. The interviews took place over a five day period with a goal of reaching the Fire Chief of each department. The author was able to reach eight Fire Chiefs when conducting

the phone survey. The other two were Battalion Chiefs assigned to fire operations. The purpose of the interview and research was stated by the author. When concluding, the author informed each department representative that the results would be provided to them for their own use. Assumption was made that those answering the questions had the authority to do so and that the information was accurate.

The third research question focused solely on airport departments and how each prioritized their non-airport responses. The author utilized resources within the Index “E” Network (ENET); a group of airport fire officers within the United States who have joined together to share information pertinent to airports. A questionnaire was sent via email to ten ENET partners to capture data related to off-airport responses and how each public safety department prioritized team deployments within their region and or State. See *Appendix B*. Results related to the survey can be found in *Appendix C*. The use of this network had limitations as all where airports of the same size per the Federal Aviation Administration’s index requirements. However, there were significant differences with regard to whether the airport was operated by the city, a port authority, or special jurisdiction.

The final question pertained to what the stakeholders at DFW Airport think about non-airport mutual aid. Owned by the cities of Dallas and Fort Worth, DFW Airport is led by a CEO and Executive Staff governed by a group of people serving as the Airport Board. The author expanded his research in this area to include those Board members, Executive staff, air carriers, and other tenants within the airport proper. General discussions along with scheduled meetings were held in an effort to obtain information as to how those who have interest in the airport feel about fire resources being deployed outside the airport.

Results

Research Question 1. What Federal, State, and local mandates exist regulating the deployment of fire resources outside the airport proper? The Federal Aviation Administration requires airports to maintain their index requirements. If, at any time the fire department serving the airport cannot meet those requirements a notification must be made to the FAA and actions must take place that have impact on airfield operations and the air carriers. DFW Airport meets the requirements of Index E, which is determined by length of the aircraft and number of daily departures. Index E airports serve aircraft that are greater than 200 feet in length (Federal Aviation Administration, 2009). No mandates exist with the FAA restricting off airport responses unless the response impacts the index requirements.

In 2007, the Governor of Texas signed a bill creating the Texas Statewide Mutual Aid System (Steve Pollock, 2009, p. 17). As part of this new plan, the development of the Texas Intrastate Fire Mutual Aid System was established and is utilized today to organize fire departments responding at the state level. The plan provides guidance for a disaster response involving those incidents related to the fire services. In researching the resource data listed in the Texas Regional Resource Network, it was found that DFW Airport has listed resources available for deployment outside the airport proper. It was determined that these resources had no negative impact on aircraft rescue fire fighting requirements as specified by the Federal Aviation Administration.

Local mutual aid agreements remain intact within the Region 4 (16 Counties) area. DFW Airport continues to reach out to the cities neighboring the airport proper. Responses to Dallas and Fort Worth, Texas are regulated through the Dallas County and Tarrant County Mutual Aid agreements. An informal discussion while attending one of the recent Fire Chief's quarterly

meetings resulted in information in the history of the local mutual aid agreements. Like other mutual aid agreements across the states, it is evident that fire departments in the Region 4 area had crossed jurisdictions for years to support neighboring fire departments without any formal written agreements. This held true for DFW Airport in 1985 as large numbers of fire resources within the area responded to the aircraft crash of Delta 191.

Research Question 2. What are the other airport public safety departments doing with response to non-airport mutual aid? A phone survey was conducted among 10 airports within the United States. See *Appendix A*. The data revealed that 90% of the airport fire departments had deployed resources as part of a State Mutual Aid System while only 30% had actually formalized an off airport response team.

When discussing the third question, there was doubt among several of the airport departments when providing their answers. Due to the fact that airports are owned and operated in a number of ways allowed for limitations and or confusion as to whether they did or did not have specific standard operating procedures for those responses outside the airport proper. For example, two of the airports surveyed advise the author that existing standard operating procedures while operating inside the airport would suffice while participating in a state deployment outside the airport proper.

In questions four and five 100% of the airport fire departments reported that when responding off airport they had encountered issues related to the team's response and each believed that the establishment of a formalized approach to organizing a team for those deployments outside the airport would provide for a safer mission.

Research Question 3. How do other airport departments prioritize non-airport responses? A questionnaire was sent via email to ten of the Index E airports who participate in the Index E

Network (ENET) See *Appendix B*. Although there were three airports who participated in the phone survey, this questionnaire provides data related to only airports of the same index rating as DFW Airport. See *Appendix C* for results to the questionnaire. In the first question 40% of the airports participate in a State Mutual Aid System while only one of those four has a formalized standard operating procedure to provide direction for their resources while outside the airport proper.

In question three 70% of the airports provide resources other than aircraft rescue fire fighting off the airport as part of local mutual aid agreements. Question four identifies how those seven airports prioritized their off airport responses. The data reveals that mass casualty response rates at the top while technical rescue response is at the bottom. One of the airports identified water rescue and recovery as a response provided by their department.

Airports who responded to the questionnaire who provide off airport mutual aid identified issues while operating in that capacity. Those issues identified are list in *Appendix C*. When compiling the data associated with question five, communications was ranked as number one with incident management and personnel accountability tied for second. These three were listed on all of the questionnaires.

Research Question 4. What do the DFW Airport stakeholders think about the non-airport mutual aid? When asking this question to the various political officials, executives, and tenants each had an array of thoughts. Although many did not question the intent of providing non-airport fire resources to others outside the airport proper, some questioned whether fire services remained adequate on the airport during such a response.

Airport Board officials and an Executive Vice President supported reaching out to other jurisdictions within the state as did many DFW Airport Board employees. Those who

commented to this question were knowledgeable of the federal and state disaster activation processes. The tenants supported the non-airport aid, but had concern related to the capabilities of the fire department while the teams were deployed. Questions such as “Do we maintain adequate coverage of our own structures during this period?” One phone interview was conducted with an airline employee who commented that all airport resources should remain on the airport. Their belief centered with the fact that the airport was a business and airlines pay a great deal for airport services.

Discussion

Airports within the United States are regulated by multiple federal, state, and local agencies. The FAA serves as the regulating authority for the airport through the Code of Federal Regulations, FAR 139 – Certification of Airports (Federal Aviation Administration, 2009). Failure to meet these requirements could have enormous fiscal and operational impact on DFW Airport and other international airports due to world travel. An airport emergency plan must remain current and identify mutual aid responses into and out of the airport proper.

The Federal Response Framework is critical in organizing our responses at every level within the nation (Department of Homeland Security, 2008). It provides us with the framework of working together for a common goal through the use of the National Incident Management Systems (NIMS). Though this effort and in partnership with state organizations, State Mutual Aid Systems began to develop throughout the nation. One such system was the Texas Intrastate Fire Mutual Aid System (TIFMAS).

The State of Texas adopted the system with the assistance and support of several agencies and organizations i.e. International Association of Fire Chiefs, Texas Fire Commission, Texas Fire Chiefs, and the Texas Forest Service (Texas Fire Chiefs Magazine, 2009). The Texas Forest

Service is responsible for the coordination of fire resources within the State of Texas and does so at the request of the Governor's Division of Emergency Management. DFW Airport participates in the state supported system and has resources available for local, regional, and state deployments.

It is the responsibility of the DFW Airport Public Safety Department to maintain a current listing of resources available for deployment outside the airport proper. This list must meet the requirements specified within the airport emergency plan and subject to regulatory requirements mandated by the Federal Aviation Administration. DFW Airport department heads have generated a formalized plan to address these concerns and currently are in compliance with the regulatory measures resulting in deployment of resources outside the airport proper.

Like DFW Airport, the research identified that many of the airports surveyed provided resources outside the airport proper. Federal and State processes seemed to be in order as well as the notification and initiation of a deployment outside the airport's jurisdiction. However, very few had actually formalized teams to carry out these deployments. It appears as though many primarily offer up their resources without actually strategically planning for the deployment.

Information gathered through the research identifies a lack of focus related to preparing personnel for a non airport deployment outside the airport proper. There seems to be a lack of readiness when the notification was received for the deployment. It was further found that those airports surveyed relied heavily upon the jurisdiction requesting aid to provide logistical and planning support for each of their teams. This may work well with deployments less than 24 hours however responses where teams were deployed for days pose new challenges.

Those challenges can be related to readiness, notification, operational strategies and tactics, and demobilization. State and federal emergency response teams do exist outside the fire

industry. There are emergency response teams in existence today and all have recognized the need for an organized approach to the overall deployment and return of their resources. Those teams included in this research include the Center for Disease Control Response Team, a Texas Public Works Response Team, SEADOG, and Texas Task Force One (urban search and rescue). Airport fire departments participating in non-airport deployments outside the airport proper should establish a standard operating procedure for the team members while deployed. The standard should address readiness focusing on training related to those type responses provided by the department, operational procedures addressing each type of response, procedures for demobilizing, and a process for recovery. Of those airports surveyed, recovery of assets expended while deployed was an issue upon returning home. See question five, *Appendix C*. In an effort to provide for a safe mission each airport should establish a State Fire Mutual Aid Response Team.

Recommendations

The information compiled and organized through this research leads the author to recommend that DFW Airport Public Safety initiate a proactive approach to the development and implementation of a State Fire Mutual Aid Response Team. The data suggests that many airport fire departments reach out and support local and state mutual aid requests. However, few actually deploy a team that is trained on how to safely operate in those conditions. In fact, in most instances it is the firefighters on duty who take the call as if it were an apartment fire in the adjoining jurisdiction.

With each day there lies the risk of major disasters; natural or man-made. Planning for disasters such as an aircraft crash is part of the normal day for DFW airport fire personnel. It is time to take this approach a step further and provide personnel with the resources to return safely

from a non-airport response outside the airport proper. This author believes that as time moves forward those departments who participate in the Texas Intrastate Fire Mutual Aid System will establish teams within their own departments.

The author recommends the development of a program identifying personnel for the team, training so that they will each be prepared for those responses related to fire services, and a guide on how to conduct business while away from the airport; operationally and administratively. The formation of the response team will enhance the efficiency and effectiveness of the mission while reducing the risk due to a lack of uniformity among the team. DFW Airport's Emergency Response Plan is a plan to orchestrate direction should a disaster occur within the airport proper. Personnel train on its use annually as it is maintained as specified within the Code of Federal Regulations (Federal Aviation Administration, 2009). Similar to this plan as well as the plans regulating State Task Force teams should be utilized as models for the development of a departmental fire mutual aid response team.

It is further recommended that DFW Airport establish a budget and an inventory cache to support the needs of the response team and its mission. Too often, personnel have been dispatched without adequate resources to sustain their operational and individual needs while outside the airport proper. In addressing the issues associated these deployments and with the establishment of this team, an all hazards approach to safety of the team and the jurisdiction in need of assistance should be used.

The author believes that the issues relative to the deployment of resources outside the airport proper can be resolved through the development of a plan for a Fire Mutual Aid Response Team. The objective can be attained through innovative thinking and collective support from the Airport Board, Executive Staff, and the department heads. All were very cooperative throughout

this project research and agreed that there was a gap related to our internal processing of a deployment outside the airport.

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Appendix A

(Phone Survey)

Question 1: Has your department deployed resources as part of the State Fire Mutual Aid System?

Question 2: Does your department have a formalized State Mutual Aid Response Team?

Question 3: Have you established any standard operating procedures to guide personnel while they are operating outside your jurisdiction as part of the State Fire Mutual Aid System?

Question 4: Have you encountered issues relative to your team’s response when operating outside your jurisdiction i.e. interoperability, incident planning, logistics, etc?

Question 5: Do you believe an internal formalized approach to a State deployment of your resources would provide for a safer mission for your teams while operating outside your jurisdiction?

	Department	Question 1	Question 2	Question 3	Question 4	Question 5
1	Boston Logan	Yes	No	Yes	Yes	Yes
2	BWI	Yes	No	Yes	Yes	Yes
3	Seattle	Yes	No	No	Yes	Yes
4	Dallas	Yes	No	Yes	Yes	Yes
5	O’Hare	Yes	Yes	Yes*	Yes	Yes
6	LAX	Yes	Yes	No	Yes	Yes
7	Houston Hobby	Yes	No	No	Yes	Yes
8	Denver	No	No	No	Yes	Yes
9	Phoenix	Yes	Yes	Yes	Yes	Yes
10	Atlanta	Yes	No	Yes*	Yes	Yes

* indicates that these departments stated during the survey that their personnel would be subject to departmental standard operating procedures while operating as part of a mutual aid resource.

Appendix B

Index E Network (ENET) Questionnaire

The questions below are part of a data collection process to determine issues relative to airport personnel responding outside the airport proper. This research is part of a project I am required to complete as a student the Executive Fire Officers Program. In an effort to collect the data, I am asking your support by completing the questionnaire below. I thank you for your support in advance and I will gladly share the results upon completion.

1. Does your department participate in a State Mutual Aid Response Plan for non-airport fire responses outside the airport proper?
2. If yes, does your department have a formalized non-airport deployment policy and procedure to guide those resources while outside the airport proper?
3. Does your department provide resources other than aircraft firefighting outside the airport proper?
4. If so, how would you prioritize the following responses? (1-5, with 1 being top priority)

Structural Response _____

Hazardous Material Response _____

Technical Rescue Response _____

Mass Casualty Response _____

Other: _____

5. Please list the top three issues your response team encountered while deployed to an incident off airport.

Appendix C

Results to Survey Questions

1. Does your department participate in a State Mutual Aid Response Plan for non-airport fire responses outside the airport proper? 4 Yes 6 No

2. If yes, does your department have a formalized non-airport deployment policy and procedure to guide those resources while outside the airport proper? 1 Yes 3 No

3. Does your department provide resources other than aircraft firefighting outside the airport proper? 7 Yes 3 No

4. If so, how would you prioritize the following responses? (1-5, with 1 being top priority)

	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10
Structural Response	2	3	4	1	3	2	4			
Hazardous Material Response	3	1	2	3	1	3	1			
Technical Rescue Response	4	4	3	2	4	4				
Mass Casualty Response	1	2	1	2	2	1	2			
Other: Dive Team/Water rescue and recovery							3			

A1-A7 (Airports who responded to this question)

5. Please list the top three issues your response team encountered while deployed to an incident off airport.

The following areas were identified as issues encountered by other departments when responding outside the airport proper.

Communications

Coordination of Resources

Incident Management

Apparatus Maintenance and Fuel

Personnel Accountability

Personnel supplies

Conflicting Operational Priorities

Demobilization processes